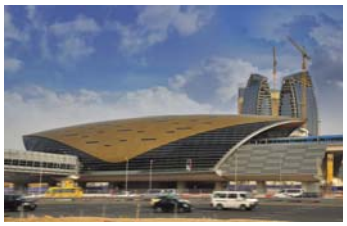
MENVIER

UL Listed Range
Fire Systems

COOPER Safety
Fire Systems

ONE COOPER

Every day, thousands of people all over the world use products made by Cooper Industries. As a premier global manufacturing company, we believe that great brands are built on high quality and excellent service. Which is why our brands have earned leading positions in the markets we serve. Cooper Safety specialises in products designed to save lives and protect property in commercial, industrial and residential buildings. It's just one of the seven divisions that continue to uphold our reputation through unparalleled sales support and customer service.



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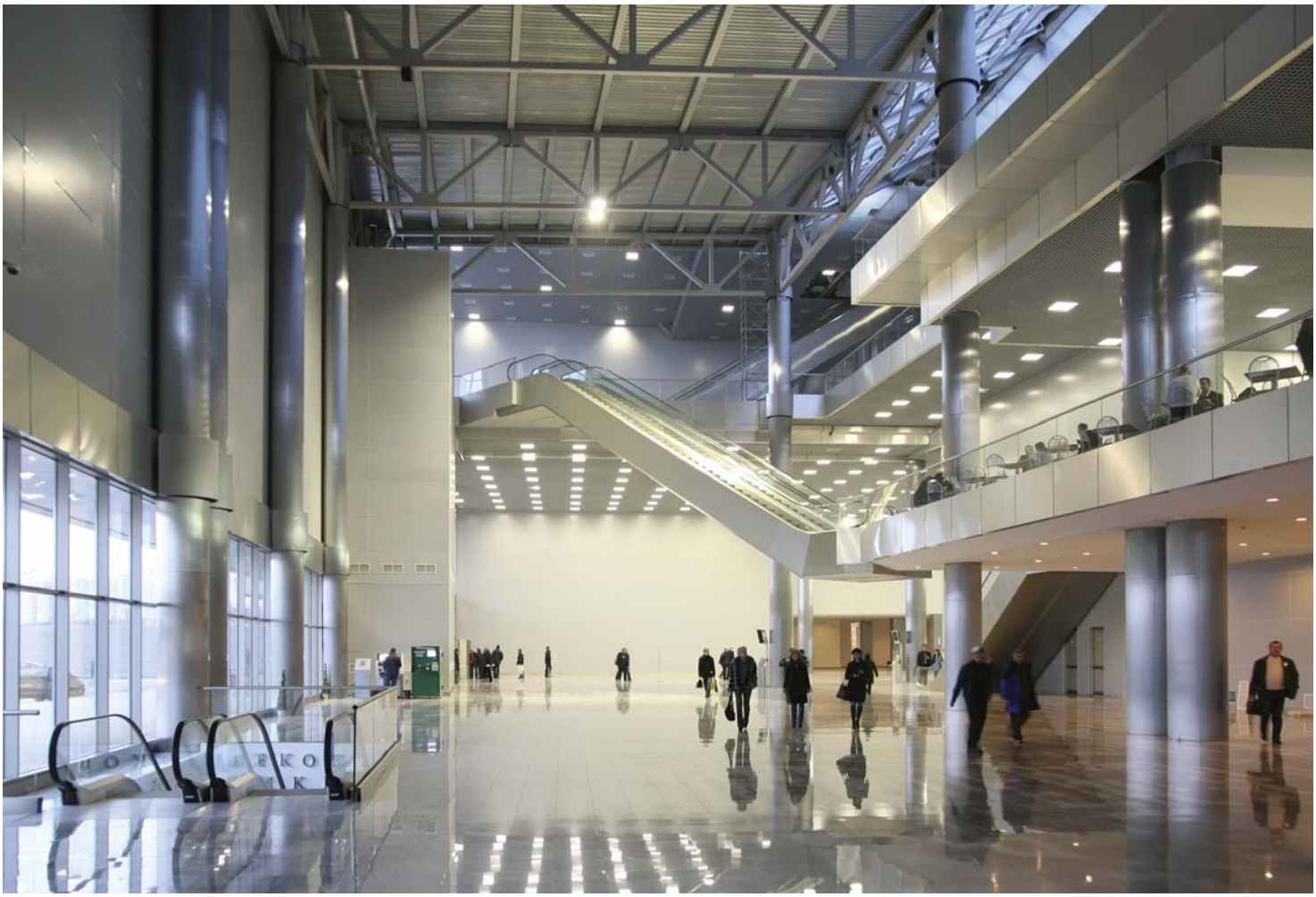

Cooper Safety Fire Systems

Cooper Fire offers a comprehensive range of UL listed fire detection products suitable for a wide range of projects, from a small simple installation to a large complex multi building site. Fire detection systems are marketed under the Cooper Fire, Menvier and JSB brands.

Cooper Fire manufacturer a wide range of products and offers complete fire solutions, not just individual components. A complete system can be specified from a single source, confident in the knowledge that all the components have been specifically designed and tested to ensure they are all fully compatible with each other and will function as a truly integrated fire detection and alarm system.

It is absolutely vital that all the elements of a fire detection system are fully compatible with each other. To support this philosophy, a large multi-disciplined research and development team is based in the UK at the Cooper Doncaster facility, responsible for the integration of the very latest technology into the design of our comprehensive range of fire products.

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ULDF6000 & ULDF6000RM Control Panels

Overview

The Menvier ULDF6000 is a high specification analogue, wall or rack mounted, UL Listed fire system available in various loop configurations. It combines sophisticated functionality with simple operation and aesthetically pleasing design.

The control panel has the ability to support complex cause and effect programming and a wide range of user controllable functions make the system ideal for a diverse range of projects from industrial applications through to large multi site commercial developments.

The ULDF6000 uses soft addressing to minimise installation time and remove the potential for error associated with manual addressing.

Each of the system components have been specifically designed to operate as part of a ULDF6000 UL Listed system providing assurance that the panel, the detectors, the interfaces and the ancillaries are all fully compatible with each other and that the full range of system functionality is supported by each device.

Features

- Touchscreen Display
- 2 or 4 Class A Style 7 SLC loops
- Event History Buffer (9,999 events) with Date/Time stamp
- 4 Notification appliance circuits (NAC's) outputs.
- Dedicated alarm, trouble, AC trouble relays
- Short circuit isolators incorporated into each loop
- Up to 200 addresses per loop
- Fully monitored network cable up to 126 panels
- Optional integral printer
- Alarm Verification
- PAS (Positive Alarm Sequence)
- Pre-Signal per Point (NFPA 70, 72 compliant)
- Remote Alarm, NAC silenced, Alarm Reset, Trouble, Supervisory and drill via addressable module

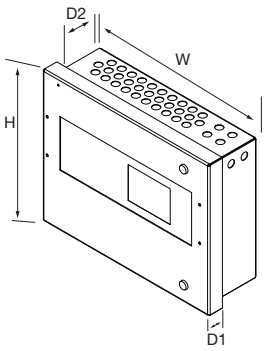
Benefits

- Supports a comprehensive range of soft addressing modules and devices for greater flexibility in design
- Menu driven graphical user interface for ease of operation
- Reduced commissioning time through soft addressing and auto learn functions
- Programming and trouble shooting time minimised by using a range of features such as auto config, walk test, system details, analogue values, etc

Technical Specification

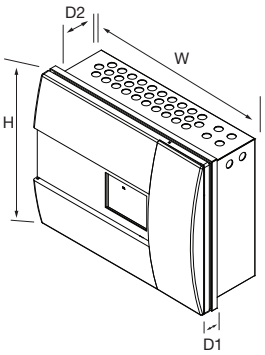
Code	ULDF6000 and ULDF6000RM
Discription	UL Analgue Control Panel
Standards	UL864 9th edition
Primary Operating Supply	120/240 V, 60 Hz, 2.0 A Supervised
Secondary Operating Supply	
Battery Voltage	24 V dc
Battery Charge Current	1.0 A (max)
Battery Derating Factor	0.1
Battery Capacity Supervised	12 Ah (max)
Notification Appliance Circuits Class B, Style Y, Sounder Group 1 sounder 1, Sounder Group 1 sounder 2, Sounder Group 2 sounder 1, Sounder Group 2 sounder 2	
Output Voltage	24 V dc
Output Current	0.75 (max)
Line Impedance	50 ohms
	When the product is powered by 240 V ac, the maximum current of 3.0 A is shared between these circuits.
	When the product is powered by 120 V ac, the maximum current of 2.25 A is shared between these circuits.
	Supervised, Power limited, Regulated
Notification Appliance Circuits Class B, Style Y, SYNC MODULE. NAC1, NAC2	
Output Voltage	24 V dc
Output Current	0.5 A (max)
Line Impedance	50 ohms (max)
	The maximum current of 0.5 A is shared between these circuits.
	Supervised, Power limited, Regulated
Alarm, Trouble Contacts. Relay Expansion	
Unity Power Factor	30 V dc
	For connection to power limited sources only
Aux Relay (AC Trouble) Contacts	
Unity Power Factor	30 V dc, 1 A
	For connection to power limited sources only
Signaling Line Circuit Style [7] Class [A] – (Addressable Loop)	
Rated Voltage	24 V dc
Maximum Current	500 mA
Line Impedance	50 Ω (max)
	Supervised, Power limited
Network SLC	
Voltage	5 V dc
Current	100 mA (max)
Line Impedance	50Ω (max)
	Power Limited
	Limited to same-enclosure Installations
Compatibility	
Suitable for use with	Menvier UL fire systems

Dimensions (Metal)



H (mm)	W (mm)	D1 (mm)	D2 (mm)
398	505	48	118

Dimensions (Plastic)



H (mm)	W (mm)	D1 (mm)	D2 (mm)
397	497	75	130

Product Codes

Code	Description
ULDF60002G	2 Loop Panel
ULDF60004G	4 Loop Panel
ULDF60002GP	2 Loop Panel c/w Integral Printer
ULDF60004GP	4 Loop Panel c/w Integral Printer
ULDF60002GNC	2 Loop Panel c/w Network Card
ULDF60004GNC	4 Loop Panel c/w Network Card
ULDF60002GPNC	2 Loop Panel c/w Integral Printer, Network Card
ULDF60004GPNC	4 Loop Panel c/w Integral Printer, Network Card
ULDF60002RM	2 Loop Panel Red Metal Box
ULDF60004RM	4 Loop Panel Red Metal Box
ULDF60002PRM	2 Loop Panel c/w Integral Printer Red Metal Box
ULDF60004PRM	4 Loop Panel c/w Integral Printer Red Metal Box
ULDF60002NCRM	2 Loop Panel c/w Network Card Red Metal Box
ULDF60004NCRM	4 Loop Panel c/w Network Card Red Metal Box
ULDF60002PNCRM	2 Loop Panel c/w Integral Printer, Network Card Red Metal Box
ULDF60004PNCRM	4 Loop Panel c/w Integral Printer, Network Card Red Metal Box
ULDFR6000L2	Rack mounted 2 Loop Panel
ULDFR6000L4	Rack Mounted 4 Loop Panel
ULDFR6000L2NC	Rack Mounted 2 Loop Panel c/w Network Card
ULDFR6000L4NC	Rack Mounted 4 Loop Panel c/w Network Card

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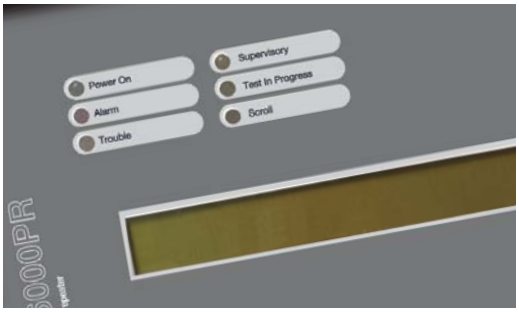
ULDF6000PR Passive Repeater Panel



2 x 40 backlit LCD display and 6 supervisory LED's

Simple user interface

Overview

The ULDF6000PR passive repeater panel, is a cost effective system which can be programmed via its informative display to be either fully passive (display only) or semi passive (restricted system control).

When loop connected the repeater panel will display the system information text of the connected control panel and will provide a fire indication, with panel number, of any connected network control panel that has fire activation.

The ULDF6000PR repeater panel does not require system programming, with the exception of local text information.

In addition to this repeater panels main menu driven 2 x 40 backlit LCD display, which provides system status information, it also has 6 supervisory LED's (Power On, Alarm, Trouble, Supervisory, Test In Progress, and Scroll).

Features

- Fully passive
- Up to 200 Repeaters can be connected to the loop
- Surface or semi-recessed mounting
- 2 x 40 backlit LCD display and 6 supervisory LED's
- Compact size

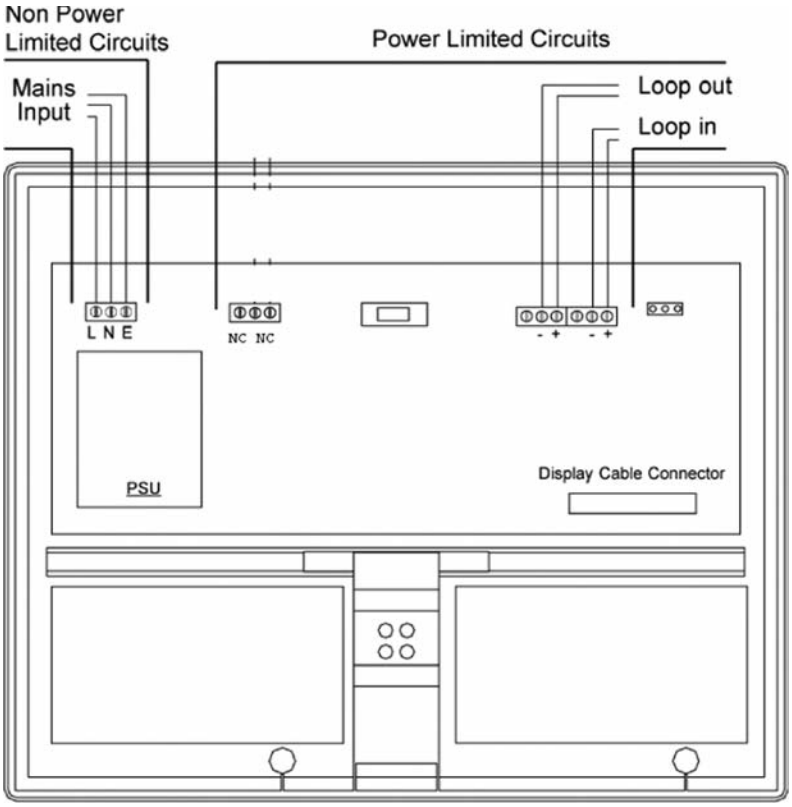
Benefits

- Menu driven easy to operate
- Simple connection to panel SLC circuit reduces wiring and time
- Distance run up to 2kms from main panel without additional cable and equipment, saving cost

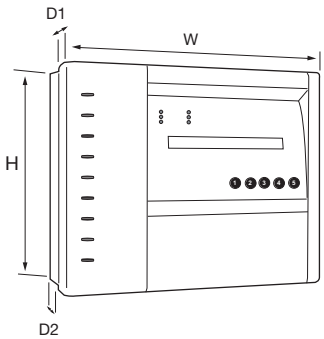
Technical Specification

Code	ULDF6000PR
Description	Passive Repeater Panel
Standards	UL864 9th edition
System Indicators	
LED's	Power on, Alarm, Trouble, Test, Supervisory, Scroll LED's
Mains Input, Supervised	
Voltage	120 V ac to 240 V ac, 60 Hz
Current	35 mA
SLC Field Wiring	
Current	0.354 mA
Wiring Gauge	12 (max) AWG
Wiring Class	Class A Style 7
Ground Fault	0.1 ohm
Supervisory, Power Limited	Yes
Line Impedance	50 Ω (max)
Batteries	
Batteries	1x12 V dc, 3.2 Ah, 0.1 derating
Battery Charge Current	0.4 A
Standby Period	24 hours + 30min alarm
Download Comms	RS232 port
Environmental	
Operating Temperature	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH
Physical	
Dimensions (H x W x D)	270mm x 332mm x 90mm
Weight	3.6kg (with batteries)
Ingress Protection	IP30
Construction	PC/ABS, UL94 5VA rating
Colour	Light Grey or Graphite
Cable Entry	12 x 20mm knockouts top of backbox
Compatibility	
Suitable for use with	Menvier UL fire systems

Standard Connections



Dimensions



H (mm)	W (mm)	D (mm)
395	332	115

Product Codes

Code	Description
ULDF6000PR	Passive Repeater Panel

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ULDPTR6000 Network Repeater Panel, Touch Screen

Overview

The ULDPTR6000 repeater panel provides sophisticated 'touch screen' functionality yet achieves a simple end-user interface operation within a compact panel design.

The ULDPTR6000 is designed to work with all UL Listed Menvier analogue fire alarm control panels as a network repeater. The Menvier 'touch-screen' repeater panel is easy to install and commission. All text is transmitted via the network and is automatically updated.

Features

- Plug and play. All information is downloaded through the network
- Touch-screen display
- Integrated network capability allows networking with the latest Menvier range of analogue fire alarm control panels
- Multi language capability
- PSU approved to EN54 pt4 and UL864 9th Edition
- Up to 126 repeaters can be connected to the network
- Programmable as an active or passive repeater
- Dual redundant network card to enhance system integrity

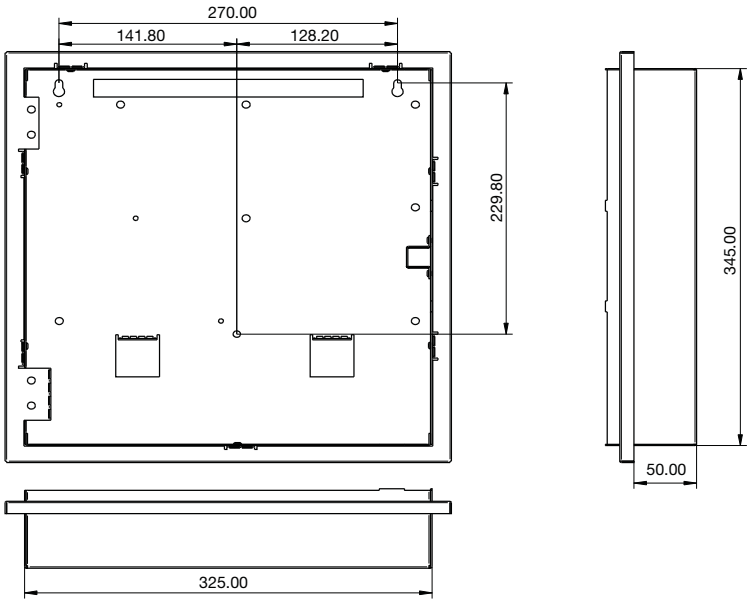
Benefits

- Plug and play requires no programming
- Easy to operate touch screen display
- System integrity, fire alarm system continues to operate even if there is a short circuit or open joint on cable
- Easy to change the language to suit the operator

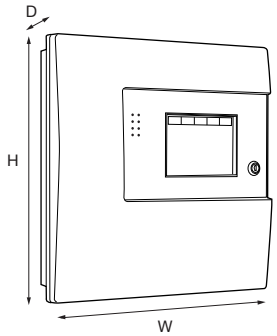
Technical Specification

Code	ULDPTR6000
Description	Repeater Panel, Touch Screen
Standards	UL864 9th edition, NFPA 70-72
System Indicators	
LED's	Power on, Alarm, General Trouble, General Supervisory, Power Trouble, System Trouble, Test, NAC Trouble.
Mains Input, Supervised, Power Limited	
Voltage	120 V ac to 240 V ac, 60 Hz
Current	100 mA
Network SLC	5 V dv, 11 mA (max)
Line impedance	50 ohm (max)
Batteries	
Batteries	2x12 V dc, 7 Ah, 0.1 derating
Battery Charge Current	1.0 Amp
Standby Period	24 hours + 30min. alarm
Programable Relay	
Programable Relay (Fire)	30 V, 1 A, Resistive
Download Comms	
Download Comms	RS232 port
Environmental	
Operating Temperature	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH
Physical	
Dimensions (H x W x D)	395mm x 332mm x 115mm
Weight	9kg (with batteries) 4kg (without batteries)
Ingress Protection	IP40
Construction	PC/ABS, UL94 5VA rating
Colour	Graphite
Display	Touch Screen
Cable Entry	11 x 20mm knockouts top of backbox
Compatibility	
Suitable for use with	Menvier UL analogue addressable fire systems

Mounting the Backbox



Dimensions



H (mm)	W (mm)	D (mm)
395	332	115

Product Codes

Code	Description
ULDPTR6000	Repeater Panel, Touch Screen

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Addressable Sensors

Addressable Sensor, Optical (UCAP320)

Addressable Sensor, Multi-Mode Heat (UCAH330)

Addressable Sensor, Opto-Heat (UCAPT340)

Overview

Photoelectric smoke sensor (opto) is suitable for most applications giving the fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

Opto-heat sensor will respond better to fast clean burning fires yet maintain the advantage of optical sensors when detecting smouldering fires. The thermal enhancement of this sensor allows a higher alarm threshold which provides a greater rejection of false alarms. The sensor will also give an alarm at temperatures above 135°F.

Rate of rise with fixed heat sensor settings will detect a rapid increase in temperature or temperatures above 135°F and should be used in environments where the ambient conditions might cause false alarms if smoke detection were to be used, for example where there is a high level of dust, fumes, steam or smoke under normal conditions.

Fixed heat sensors settings will detect temperatures above 135°F or 194°F and should be used in environments where the ambient conditions might cause false alarms if smoke detection were to be used, for example where there is a high level of dust, fumes, steam or smoke under normal conditions. For photoelectric and opto-heat operation the sensor automatically compensates for gradual increase in the scatter signal due to contamination e.g. dust build up.

Features

- Built-in short circuit isolators
- Stylish low profile design
- 360° viewable LED design
- Removable detector chamber
- Drift compensation

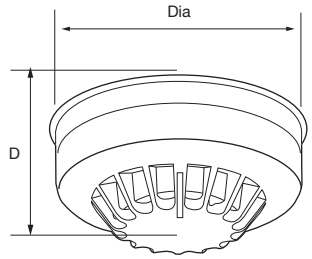
Benefits

- Plug and play no hard addressing required
- ‘Clean me’ feature means sensor can be cleaned on site using the Menvier manual cleaning procedure
- The programmable heat sensor reduces the number of parts required in the system

Technical Specification

Code	UCAP320	UCAPT340	UCAH330
Description	Addressable Sensor, Optical	Addressable Sensor, Opto-Heat	Addressable Sensor, Multi-Mode Heat
Standards	UL268	UL268	UL521
Supply Ratings			
Working Voltage	18 V dc to 30 V dc	18 V dc to 30 V dc	18 V dc to 30 V dc
Voltage Waveform	Filtered dc +/- 1 V (max), ripple @120Hz	Filtered dc +/- 1 V (max), ripple @120Hz	Filtered dc +/- 1 V (max), ripple @120Hz
Standby Current	220 μA (average)	220 μA (average)	220 μA (average)
Alarm Current	5 mA (max)	5 mA (max)	5 mA (max)
Timings			
Start-up Time	2 seconds	2 seconds	2 seconds
Reset Time	2 seconds (max)	2 seconds (max)	2 seconds (max)
Sensitivity			
Sensitivity	2.55+/- 0.33%/ft	2.55+/- 0.33%/ft	N/A
Sensitivity Checker	Use No-Climb, TRUTEST, UL Listing 77TL	Use No-Climb, TRUTEST, UL Listing 77TL	Use No-Climb, TRUTEST, UL Listing 77TL
Heat Class			
Heat Element Rating	N/A	135°F	135°F ROR + Fixed, + Fixed 135°F Fixed, 194°F Fixed
Heat Detector Spacing	N/A	50ft (heat alone operation)	50ft
Mounting Position	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas
Environmental			
Operating Temperature	32°F to 100°F	32°F to 100°F	32°F to 100°F / 32°F to 150°F (194°F setting)
Compatibility			
Compatibility Indentifier	W002	W002	W002
Compatible Bases	WBA or UCAB300	WBA or UCAB300	WBA or UCAB300
Suitable for use with	Menvier UL fire systems	Menvier UL fire systems	Menvier UL fire systems

Dimensions



Description	Dia (mm)	D (excl base)	D (incl base)
Optical	101	33	45
Opto-Heat	101	43	55
Multi-Mode Heat	101	43	55

Product Codes

Code	Description
UCAP320	Addressable Sensor, Optical
UCAPT340	Addressable Sensor, Opto Heat
UCAH330	Addressable Sensor, Multi-Mode Heat, (Programmable as Rate of Rise 135°F or 194°F)

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UCAB300 Addressable Sensor Base

Addressable Sensor, Opto-Heat (UCAPT340)

Addressable Sensor, Optical (UCAP320)

Addressable Sensor, Multi-Mode Heat (UCAH330)

Overview

The UCAB300 has been specifically designed to be compatible with UL range of analogue sensors.

This standard base is designed for flexibility, simplicity and speed of installation.

Features

- Additional space for termination
- Dedicated earth terminal
- Secure closure

Benefits

- Positive action ensures detector is connected
- Quick and easy to terminate wiring

Installation

Wiring Hints

- Each terminal is suitable for clamping up to 2 wires.
- Clamping of 2 wires of very different diameters under one screw is not commended.
- Suitable for mounting to mounting boxes with 50-80mm fixing centres.

General

If difficulty is experienced when mounting the detector, this may be due to the following:

- Wiring causing an obstruction - move or shorten wires.
- Although the base is tolerant to uneven mounting surfaces, a very uneven surface may cause the base to deform when the mounting screws are tightened down - loosen screws to reduce this or slide base to a more flat position.

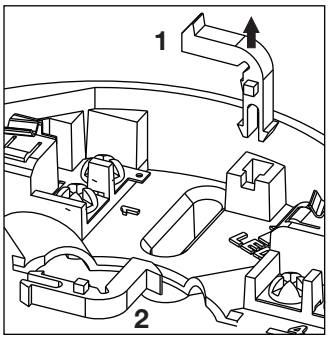
Utilising Locking Tab

Mounting base includes an optional feature to prevent the removal of the detector without the use of a tool.

1. Remove the standard fit retaining clip.
2. Insert the locking clip which is located at the centre of the base as shown.

Mount the detector onto the base and rotate fully clockwise until it finally clicks.

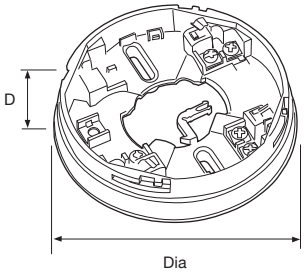
The detector is now locked into position. Remove by utilising a suitable tool (eg a thin screwdriver) into the hole in the detector cover. Gently push the tool into the detector and rotate anticlockwise.



Warning!

Do not use high voltage testers when detectors or control panel are connected to the system.

Dimensions



Description	Dia (mm)	D (mm)
Sensor Base	104	22

Product Codes

Code	Description
UCAB300	Common Base

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Conventional Detectors

Conventional Detector, Optical (UCPD-2W)

Conventional Detector, Multi-Mode Heat
(UCHT-2W, UCHTI-2W, UCHR-2W, UCHRI-2W)

Conventional Detector, Opto-Heat (UCPT-2W)

Overview

Photoelectric smoke detector (opto) is suitable for most applications giving the fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

Opto-heat detector will respond better to fast clean burning fires yet maintain the advantage of optical detectors when detecting smouldering fires. The thermal enhancement of this detector allows a higher alarm threshold which provides a greater rejection of false alarms. The detector will also raise an alarm at temperatures above 135°F.

Rate of Rise detector and Fixed Heat detector will detect a rapid increase in temperature or temperatures above 135°F or 194°F (dependent on switch selection) and should be used in environments where the ambient conditions might cause false alarms if smoke detection were to be used, for example where there is a high level of dust, fumes, steam or smoke under normal conditions.

Features

- Stylish low profile design
- 360° viewable LED design
- Removable detector chamber
- Drift compensation

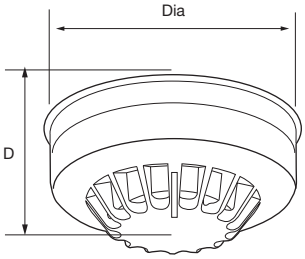
Benefits

- Plug and play no hard addressing required
- 'Clean me' feature means sensor can be cleaned on site using the Menvier manual leaning procedure

Technical Specification

Code	UCPD-2W	UCPT-2W	UCHT-2W	UCHTI-2W	UCHR-2W	UCHRI-2W
Description	Conventional Detector Optical, 2 Wire	Conventional Detector Opto-Heat, 2 Wire	Conventional Detector Fixed Heat, 135°F, 2 Wire	Conventional Detector Fixed Heat, 194°F, 2 Wire	Conventional Detector Rate of Rise & Fixed Heat 135°F, 2 Wire	Conventional Detector Rate of Rise & Fixed Heat 194°F, 2 Wire
Standards	UL268	UL268	UL521	UL251	UL251	UL251
Supply Ratings						
Working Voltage	15 V dc to 30 V dc	15 V dc to 30 V dc	15 V dc to 30 V dc	15 V dc to 30 V dc	15 V dc to 30 V dc	15 V dc to 30 V dc
Voltage Waveform	Filtered dc +/- 1 V (max), ripple @120Hz	Filtered dc +/- 1 V (max), ripple @120Hz	Filtered dc +/- 1 V (max), ripple @120Hz	Filtered dc +/- 1 V (max), ripple @120Hz	Filtered dc +/- 1 V (max), ripple @120Hz	Filtered dc +/- 1 V (max), ripple @120Hz
Standby Current	95 µA (average)	95 µA (average)	70 µA (average)	70 µA (average)	70 µA (average)	70 µA (average)
Alarm Current	must be held externally to 40 mA (max)	must be held externally to 40 mA (max)	must be held externally to 40 mA (max)	must be held externally to 40 mA (max)	must be held externally to 40 mA (max)	must be held externally to 40 mA (max)
Surge Current	340 µA (max)	340 µA (max)	340 µA (max)	340 µA (max)	340 µA (max)	340 µA (max)
Timings						
Start-up Time	20 seconds	20 seconds	20 seconds	20 seconds	20 seconds	20 seconds
Reset Time	2 seconds (max)	2 seconds (max)	2 seconds (max)	2 seconds (max)	2 seconds (max)	2 seconds (max)
Sensitivity						
Sensitivity	2.55+/- 0.33%/ft	2.55+/- 0.33%/ft	N/A	N/A	N/A	N/A
Sensitivity Checker	Use No-Climb, TRUTEST, UL Listing 77TL	Use No-Climb, TRUTEST, UL Listing 77TL	Use No-Climb, TRUTEST, UL Listing 77TL	Use No-Climb, TRUTEST, UL Listing 77TL	Use No-Climb, TRUTEST, UL Listing 77TL	Use No-Climb, TRUTEST, UL Listing 77TL
Heat Class						
Heat Element Rating	N/A	135°F	135°F	194°F	135°F	194°F
Heat Detector Spacing	N/A	50ft (heat alone operation)	50ft	50ft	50ft	50ft
Mounting Position	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas
Environmental						
Operating Temperature	32°F to 100°F	32°F to 100°F	32°F to 100°F	32°F to 150°F	32°F to 150°F	32°F to 150°F
Mounting Position	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas
Compatibility						
Compatibility Indentifier	W001	W001	W001	W001	W001	W001
Compatible Bases	CB or CB2E	CB or CB2E	CB or CB2E	CB or CB2E	CB or CB2E	CB or CB2E
Suitable for use with	Menvier UL fire systems	Menvier UL fire systems	Menvier UL fire systems	Menvier UL fire systems	Menvier UL fire systems	Menvier UL fire systems

Dimensions



Description	Dia (mm)	D (excl base)	D (incl base)
Optical	101	33	45
Opto-Heat	101	43	55
Multi-Mode Heat	101	43	55

Product Codes

Code	Description
UCPTR-4W	4 Wire Detector
UCPD-2W	2 Wire Detector, Optical
UCPT-2W	2 Wire Detector, Opto-Heat
UCHT-2W	2 Wire Detector, Fixed Heat 135°F
UCHTI-2W	2 Wire Detector, Fixed Heat 194°F
UCHR-2W	2 Wire Detector. Rate of Rise and Fixed Heat 135°F
UCHRI-2W	2 Wire Detector, Rate of Rise and Fixed Heat 194°F

COOPER Safety
Fire Systems

SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

CB2E & CB Conventional Detector Bases

Conventional Detector, Optical (UCPD-2W)

Conventional Detector, Opto-Heat (UCPT-2W)

Conventional Detector, Multi-Mode Heat
(UCHT-2W, UCHTI-2W, UCHR-2W, UCHRI-2W)

CB - Wide Base

Overview

The CB2E and CB have been specifically designed to be compatible with UL range of conventional detectors.

Both bases have been designed for flexibility, simplicity and speed of installation.

Features

- Additional space for termination
- Dedicated earth terminal
- Secure closure

Benefits

- Positive action ensures detector is securely connected
- Quick and easy to terminate wiring

Installation

Wiring Hints

- Each terminal is suitable for clamping up to 2 wires.
- Clamping of 2 wires of very different diameters under one screw is not commended.
- Suitable for mounting to mounting boxes with 50-80mm fixing centres.

General

If difficulty is experienced when mounting the detector, this may be due to the following:

- Wiring causing an obstruction - move or shorten wires.
- Although the base is tolerant to uneven mounting surfaces, a very uneven surface may cause the base to deform when the mounting screws are tightened down - loosen screws to reduce this or slide base to a more flat position.

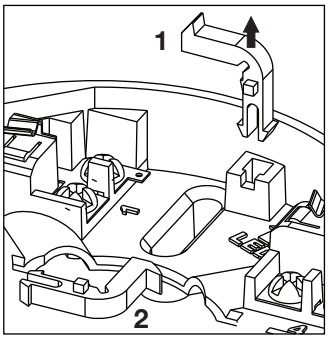
Utilising Locking Tab

Mounting base includes an optional feature to prevent the removal of the detector without the use of a tool.

1. Remove the standard fit retaining clip.
2. Insert the locking clip which is located at the centre of the base as shown.

Mount the detector onto the base and rotate fully clockwise until it finally clicks.

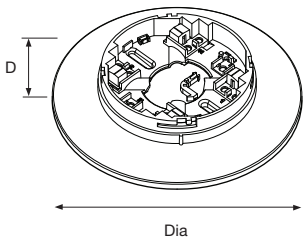
The detector is now locked into position. Remove by utilising a suitable tool (eg a thin screwdriver) into the hole in the detector cover. Gently push the tool into the detector and rotate anticlockwise.



Warning!

Do not use high voltage testers when detectors or control panel are connected to the system.

Dimensions



Description	Dia (mm)	D (mm)
Detector Base	102	22
Wide Base	158	22

Product Codes

Code	Description
CB2E	Detector Base
CB	Wide Detector Base

COOPER Safety
Fire Systems

SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

Addressable Pull Stations

UMPS-400X - Pull Station, Explosion Proof

UMPS-100 / UMPS-100WP / UMPS-200 - Pull Station

Overview

This range of manual pull stations are constructed of high quality, die-cast metal for long lasting performance and may be mounted on a single gang backbox.

Available in either single or dual action configurations for indoor or outdoor use with SPST contacts and terminal strip connections.

The addressable UMPS range consists of the UL listed MPS range of pull stations and the UL listed fast response addressable input initiating module (ULMCIM-C).

All models are painted red with raised white lettering and a locking mechanism to prevent unauthorized reset.

Features

- Mounting: Wall
- Single or dual action
- Terminal Strip Connections
- Key Reset
- Corrosion resistant
- Single gang back box
- Class A, style 7 SLC

Benefits

- High quality die cast metal case for lasting performance
- Plug and play no hard addressing required

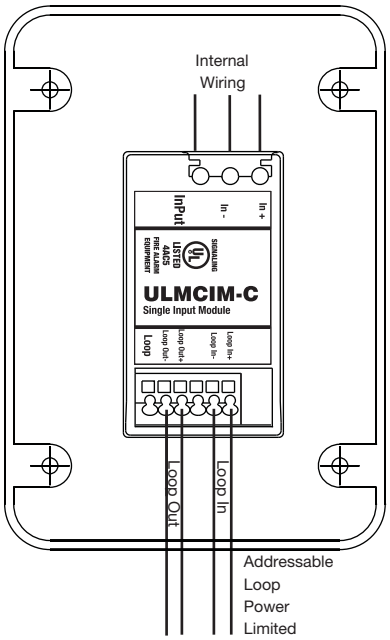
Installation

The Series MPS Pull Station may be surface mounted indoors with a separately ordered backbox option or flush mounted on a standard single gang switch plate. In either case be sure to follow local codes and regulations. To comply with ADA standards the Pull Station must be less than 48 inches above the floor for front wheelchair access, and less than 54 inches above the floor for side wheelchair access. MPS Pull Stations, when mounted to the Series MPS-WP Backbox with Gasket Assembly, are listed for outdoor use and are NEMA-3R listed.

Surface Mount
A surface mount installation uses a red diecast (MPS-WB) or sheet metal (MPS-ISB) Backbox. The backbox has four pre-drilled mounting holes of 0.187-inch diameter. A screw size of 8 or smaller can be used to attach the backbox to a wall. After the backbox is in place, attach the conduit. The diecast backbox (MPS-WB) has an opening that is tapped for a 1/2 inch NPT fitting which may be oriented at the top or bottom when the box is attached to the wall. The sheet metal backbox (MPS-ISB) has conduit knockouts. Field wiring is connected to a terminal block as shown in the wiring drawings. The wiring should not be wrapped around the terminal, but placed under the clamping plate. The housing is locked using a keylock. Unlock the housing by turning the key clockwise and swing down the front of the housing to make the sheet metal mounting plate accessible. Mount the metal plate to the backbox using the four 1/4 inch length, 8-32 screws that are supplied. If a Breakrod (MPS-RODS) is being used, move the PULL handle to about a 45-degree angle with the face of the housing. Insert a breakrod into the cavity beneath the PULL handle. Place the PULL handle back into the normal position (flush with the housing). While holding the PULL handle in place, move the housing back to the upright position and lock. The Pull Station in now ready for operation.

Flush Mount
Most flush mount installations may be attached to a standard single gang switch box (not supplied) The only difference between a surface mount installation and flush mount installation is that the two 6-32 screws are placed through the slots that are centered on the metal plate.

Standard Connection



Product Codes

Code	Description
UMPS-100	Pull Station, SPST Single Action, Terminals, Key Reset +ULMCIM-C
UMPS-400X	Pull Station, Explosion Proof, Single Action, Key Reset +ULMCIM-C
UMPS-100WP	Pull Station, SPST Single Action, Terminals, Key Reset +ULMCIM-C
UMPS-200	Pull Station, SPST Double Action, Terminals, Key Reset +ULMCIM-C

COOPER Safety
Fire Systems

SIGNALING
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FIRE ALARM
EQUIPMENT

HNR & HNWC Horns

HNWC - Horn, Ceiling Mount

HNR - Horn, Wall Mount

Overview

The UL range of notification devices are designed to exceed your expectations and offer the most polished, feature rich and cost effective solution.

Both stylish and inspiring, architects and engineers can now specify the industry's sleekest looking fire notification appliance, while being afforded all the features and benefits that provide the industry's lowest total cost of ownership.

Features

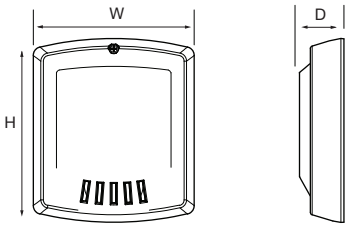
- A combination of 12 and 24 VDC in one appliance providing the capability to use a single appliance for different installation requirements
- A universal, common base for retrofit jobs, limited space environments and pre-existing wire configurations. It comes complete with a Contact Cover for protection against dirt, dust, paint and damage to the contacts. The Contact Cover also acts as a shunting device to allow pre-wire testing for common wiring issues.
- 80% reduction in SKUs - Up to 9 models now in 1 appliance (3 audible settings)

Benefits

- Up to 48% savings in current draw over similar products,with the latest horn/strobe products you can install more appliances per a given circuit.

- **Easier to install - Save up to 14% cost of installation**
- 5 Mounting Options - 1 gang, 2 gang, 4"sq., 3.5 octal, 4" octal box
- Voltage test points for quick troubleshooting and easy spot checking
- 1/16" deep mounting error relief Pre-wire capability to check for wiring & ground faults prior to appliance installation
- Contact cover not only provides protection from dirt, dust, paint and accidental damage, it allows for pre-wire testing and troubleshooting

Dimensions - Wall

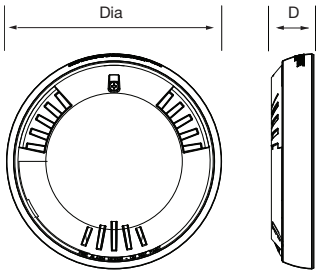


H (mm)	W (mm)	D (mm)
133	116	56

Technical Specification

Code	HNR	HNWC
Description	Horn, Wall Mounted	Horn, Ceiling Mounted
Standards	UL Standard 1971 & UL Standard 464	UL Standard 1971 & UL Standard 464
Operation		
12/24 V dc	90/95/99 dBA)	90/95/99 dBA)
Environmental		
Operating Temperature	0°C to 49°C	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH	0 to 93 %R
Compatibility		
Suitable for use with	Menvier UL fire systems	Menvier UL fire systems

Dimensions - Ceiling



Dia (mm)	D (mm)
166	34

Product Codes

Code	Description
HNR	Horn, Wall Mount, Snap Base, up to 105 dB @ 1meter
HNWC	Horn, Ceiling Mount, Snap Base, up to 105 dB @ 1meter

COOPER Safety
Fire Systems

SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

HSR & HSWC Horn Strobes

HSWC - Horn Strobe, Ceiling Mounted

HSR - Horn Strobe, Wall Mounted

Overview

The UL range of notification devices are designed to exceed your expectations and offer the most polished, feature rich and cost effective solution.

Both stylish and inspiring, architects and engineers can now specify the industry's sleekest looking fire notification appliance, while being afforded all the features and benefits that provide the industry's lowest total cost of ownership.

Features

- **80% reduction in SKUs - Up to 9 models now in 1 appliance**
- 3 audible settings
- 8 candela settings in 1 device
  Wall - 15/1575/30/75/95/110/135/185
  Ceiling - 15/30/60/75/95/115/150/177

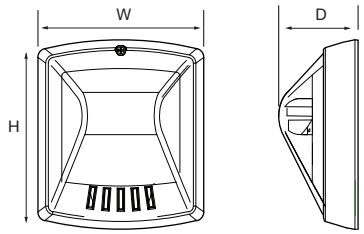
- A combination of 12 and 24 VDC in one appliance providing the capability to use a single appliance for different installation requirements
- A universal, common base for retrofit jobs, limited space environments and pre-existing wire configurations. It comes complete with a Contact Cover for protection against dirt, dust, paint and damage to the contacts. The Contact Cover also acts as a shunting device to allow pre-wire testing for common wiring issues.

Benefits

- Up to 48% savings in current draw over similar products, with the latest horn/strobe products you can install more appliances per a given circuit.
- A combination of 12 and 24 VDC in one appliance

- **Easier to install - Save up to 14% cost of installation****
- 5 Mounting Options - 1 gang, 2 gang, 4"sq., 3.5 octal, 4" octal box
- Voltage test points for quick troubleshooting and easy spot checking
- 1/16" deep mounting error relief Pre-wire capability to check for wiring & ground faults prior to appliance installation
- Contact cover not only provides protection from dirt, dust, paint and accidental damage, it allows for pre-wire testing and troubleshooting

Dimensions - Wall

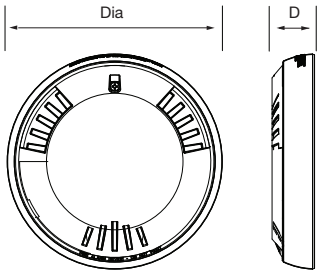


H (mm)	W (mm)	D (mm)
133	116	56

Technical Specification

Code	HSR	HSWC
Description	Horn Strobes, Wall Mounted	Horn Strobes, Ceiling Mounted
Standards	UL Standard 464	UL Standard 464
Opperation		
12/24 Vdc	15/1575/30/75/95/110/135/185 cd, 90/95/99 dB(A)	15/30/60/75/95/115/150/177 cd, 90/95/99 dB(A)
Environmental		
Operating Temperature	0°C to 49°C	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH	0 to 93 %RH
Compatibility		
Suitable for use with	Menvier UL fire systems	Menvier UL fire systems

Dimensions - Ceiling



Dia (mm)	D (mm)
166	34

Horn Strobe Ratings

Horn Strobe Ratings per UL 1971 & UL 464 at 24 Vdc

		UL Max Current* at 99 dB(A)												
		24 V dc											12 V dc	
Mode	Regulated Voltage Range V dc	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.082	0.095	0.102		0.148	0.176	0.197		0.242			0.282	0.125	0.159
HSC	8.0-33.0	0.082		0.102	0.141	0.148	0.176		0.197		0.242	0.282		0.125	

Horn Strobe Ratings per UL 1971 & UL 464 at 24 V dc

		UL Max Current* at 95 dB(A)												
		24 V dc											12 V dc	
Mode	Regulated Voltage Range V dc	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.073	0.083	0.087		0.139	0.163	0.186		0.230			0.272	0.122	0.153
HSC	8.0-33.0	0.073		0.087	0.128	0.139	0.163		0.186		0.230	0.272		0.122	

Horn Strobe Ratings per UL 1971 & UL 464 at 24 V dc

		UL Max Current* at 90 dB(A)												
		24 V dc											12 Vdc	
Mode	Regulated Voltage Range V dc	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.065	0.075	0.084		0.136	0.157	0.184		0.226			0.267	0.120	0.148
HSC	8.0-33.0	0.065		0.084	0.120	0.136	0.157		0.184		0.226	0.267		0.120	

All strobe models are UL dual listed - meeting both UL1638 and UL1971 requirements. As dual listed appliances, these weatherproof strobes are listed for outdoor applications under UL 1638 as well as under UL 1971, the Standard for Safety Signaling Devices for Hearing Impaired. With an extended temperature range of –31°F to 150°F (-40°C to 66°C), the weatherproof appliances meet or exceed UL outdoor test requirements for rain, humidity and corrosion resistance while providing multiple strobe intensity options, including the highest strobe ratings available for area coverage per NFPA 72 strobe spacing tables (up to 185 candela for wall mounting and 177 candela for ceiling mounting).

Product Codes

Code	Description
HSR	Horn Strobe, Wall Mount, Snap Base, 153075100cd up to 105 dB @ 1meter
HSWC	Horn Strobe, Ceiling Mount, Snap Base, 153075100cd up to 105 dB @ 1meter

COOPER Safety
Fire Systems

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FIRE ALARM
EQUIPMENT

STR & STWC Synchronised Strobes

STWC - Synchronised Strobe, Ceiling Mounted

STR - Synchronised Strobe, Wall Mounted

Overview

The UL range of notification devices are designed to exceed your expectations and offer the most polished, feature rich and cost effective solution.

Both stylish and inspiring, architects and engineers can now specify the industry's sleekest looking fire notification appliance, while being afforded all the features and benefits that provide the industry's lowest total cost of ownership.

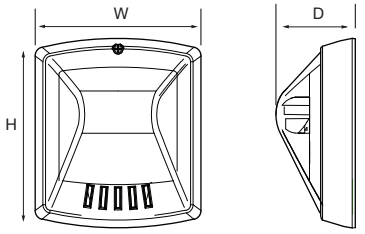
Features

- Industry's highest strobe candela options
- Models with field selectable tone, dBA and candela settings
- Wall or ceiling mounting options
- Surface of semi-flush mounting
- IN/Out wiring termination accepting two #12-18 AWG wires at each terminal
- A combination of 12 and 24 VDC in one appliance providing the capability to use a single appliance for different installation requirements
- A universal, common base for retrofit jobs, limited space environments and pre-existing wire configurations. It comes complete with a Contact Cover for protection against dirt, dust, paint and damage to the contacts. The Contact Cover also acts as a shunting device to allow pre-wire testing for common wiring issues.

Benefits

- Up to 48% savings in current draw over similar products, with the latest horn/strobe products you can install more appliances per a given circuit.

Dimensions - Wall

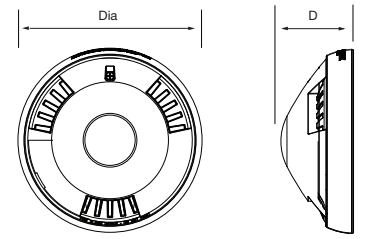


H (mm)	W (mm)	D (mm)
133	116	56

Technical Specification

Code	STR	STWC
Description	Synchronised Strobes, Wall Mounted	Synchronised Strobes, Ceiling Mounted
Standards	UL Standard 1971	UL Standard 1971
Opperation		
12/24 Vdc	15/1575/30/75/95/110/135/185 cd	15/1575/30/75/95/110/135/185 cd
Environmental		
Operating Temperature	0°C to 49°C	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH	0 to 93 %RH
Compatibility		
Suitable for use with	Menvier UL fire systems	Menvier UL fire systems

Dimensions - Ceiling



Dia (mm)	D (mm)
166	34

Horn Strobe Ratings

Horn Strobe Ratings per UL 1971 & UL 464 at 24 Vdc

		UL Max Current* at 99 dB(A)												
		24 V dc											12 V dc	
Mode	Regulated Voltage Range V dc	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.082	0.095	0.102		0.148	0.176	0.197		0.242			0.282	0.125	0.159
HSC	8.0-33.0	0.082		0.102	0.141	0.148	0.176		0.197		0.242	0.282		0.125	

Horn Strobe Ratings per UL 1971 & UL 464 at 24 V dc

		UL Max Current* at 95 dB(A)												
		24 V dc											12 V dc	
Mode	Regulated Voltage Range V dc	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.073	0.083	0.087		0.139	0.163	0.186		0.230			0.272	0.122	0.153
HSC	8.0-33.0	0.073		0.087	0.128	0.139	0.163		0.186		0.230	0.272		0.122	

Horn Strobe Ratings per UL 1971 & UL 464 at 24 V dc

		UL Max Current* at 90 dB(A)												
		24 V dc											12 Vdc	
Mode	Regulated Voltage Range V dc	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.065	0.075	0.084		0.136	0.157	0.184		0.226			0.267	0.120	0.148
HSC	8.0-33.0	0.065		0.084	0.120	0.136	0.157		0.184		0.226	0.267		0.120	

All strobe models are UL dual listed - meeting both UL1638 and UL1971 requirements. As dual listed appliances, these weatherproof strobes are listed for outdoor applications under UL 1638 as well as under UL 1971, the Standard for Safety Signaling Devices for Hearing Impaired. With an extended temperature range of –31°F to 150°F (-40°C to 66°C), the weatherproof appliances meet or exceed UL outdoor test requirements for rain, humidity and corrosion resistance while providing multiple strobe intensity options, including the highest strobe ratings available for area coverage per NFPA 72 strobe spacing tables (up to 185 candela for wall mounting and 177 candela for ceiling mounting).

Product Codes

Code	Description
STR	Synchronization Strobe, Wall Mount, Snap Base, 153075110cd
STWC	Synchronization Strobe, Ceiling Mount Snap Base, 15307595cd

COOPER Safety
Fire Systems

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FIRE ALARM
EQUIPMENT

RSSWP-2475W-FR & RSSWP-2475C-FW

Synchronised Strobes, Outdoor

RSSWP-2475C-FW -
Synchronised Strobe, Ceiling Mounted, Outdoor

RSSWP-2475-FR -
Synchronised Strobe, Wall Mounted, Outdoor

Overview

The UL range of notification devices are designed to exceed your expectations and offer the most polished, feature rich and cost effective solution.

Both stylish and inspiring, architects and engineers can now specify the industry's sleekest looking fire notification appliance, while being afforded all the features and benefits that provide the industry's lowest total cost of ownership.

Features

- Strobe Candela
  - 77°F (25°C) 180cd
  - -31°F (35°C) 75cd
- Voltage Range
  - 12 VDC 8.0-17.5
  - 24 VDC 16.0 - 33.0

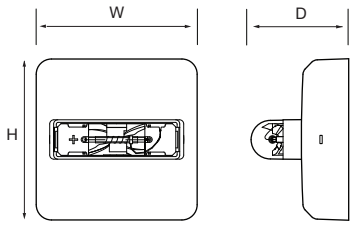
- A combination of 12 and 24 VDC in one appliance providing the capability to use a single appliance for different installation requirements
- A universal, common base for retrofit jobs, limited space environments and pre-existing wire configurations. It comes complete with a Contact Cover for protection against dirt, dust, paint and damage to the contacts. The Contact Cover also

Benefits

- Up to 48% savings in current draw over similar products, with the latest horn/strobe products you can install more appliances per a given circuit.

RSSWP-2475W-FR & RSSWP-2475C-FW - Synchronised Strobes, Outdoor

Dimensions



H (mm)	W (mm)	D (mm)
131	131	110

All strobe models are UL dual listed - meeting both UL1638 and UL1971 requirements. As dual listed appliances, these weatherproof strobes are listed for outdoor applications under UL 1638 as well as under UL 1971, the Standard for Safety Signaling Devices for Hearing Impaired. With an extended temperature range of –31°F to 150°F (-40°C to 66°C), the weatherproof appliances meet or exceed UL outdoor test requirements for rain, humidity and corrosion resistance while providing multiple strobe intensity options, including the highest strobe ratings available for area coverage per NFPA 72 strobe spacing tables (up to 185 candela for wall mounting and 177 candela for ceiling mounting).

Technical Specification

Code	RSSWP-2475W-FR	RSSWP-2475C-FW
Description	Synchronised Strobes, Wall Mounted, Outdoor	Synchronised Strobes, Ceiling Mounted, Outdoor
Standards	UL1638 & UL1971	UL1638 & UL1971
Operation		
	Synchronisation strobe 75 cd	Synchronisation strobe 75 cd
Environmental		
Operating Temperature	-40°C to 60°C	-40°C to 60°C
Humidity (Non Condensing)	0 to 95 %RH	0 to 95 %RH
Compatibility		
Suitable for use with	Menvier UL fire systems	Menvier UL fire systems

Candela Ratings

Candela Ratings				
Series	UL1971	UL1638 @ 77°F	UL1688 @ -40°F	Max Current
2475	30**	180	115	0.138

** Wall mount rating only

Product Codes

Code	Description
RSSWP-2475W-FR	Synchronization Strobe, Wall Mount, Outdoor, 75cd
RSSWP-2475C-FW	Synchronization Strobe, Ceiling Mount, Outdoor, 75cd
WPSBB	Exposed Conduit, Surface Mount
WPSBB + WPKIT	Concealed Conduit, Surface Mount
WFP	Back Box, Flush Mount

COOPER Safety
Fire Systems

SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

ULCS354 4 Way Sounder Controller Unit

Overview

An extensive range of interfaces are available to support the Menvier range of UL control panels, providing solutions for most design requirements.

The ULCS354 4 way sounder controller unit is a loop connected interface, which provides the facility to power and control 4 independent conventional sounder circuits. This greatly simplifies installation in applications where specialist sounders or beacons are required by avoiding the need to connect them directly to the analogue control panel.

The unit only uses a single address yet each circuit can be independently controlled according to the required cause and effect programming.

Features

- Quick and simple to install
- Avoids the need to wire conventional sounders back to the main panel
- 4 separate sounder circuits (0.4 A)
- All outputs are independently programmable
- Battery backup via integral battery
- Built in short circuit isolator class A style 7

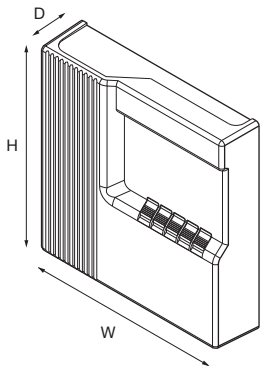
Benefits

- Plug and play, no hard addressing required
- Increased system integrity. Self powered independency of SLC
- No external short circuit isolator required
- Beacon and strobe can be wired direct to the interface thereby saving time and cabling

Technical Specification

Code	ULCS354
Description	4 Way Sounder Controller Unit
Standards	UL864 9th edition
Signalling Line Circuit	
Style 7, Class A, Supervised, Power Limited	
SLC Current	0.417 mA to 5.4 mA
Voltage	24 V
Line Impendance	50
Sounder 1, 2, 3, 4	
Style Y, Class B, Supervised, Power Limited	
Voltage	24 V
Sounder Load Per Channel	0.4 A (max)
Sounder Load Total	1.6 A (max)
End of Line Resistor	6.8 k
Line Impedance	16 (max)
Mains Supply	
Voltage	120 V ac to 240 V ac
Current	0.1 A
Frequency	60 Hz
Environmental	
Operating Temperature	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH
Physical	
Dimensions (H x W x D)	300mm x 300mm x 74mm
Weight	5.4kg
Ingress Protection	IP40
Battery Backup	2 x 12 V, 4 Ah, 0.1 derating factor
Standby	24 Hours + 30mins alarm
Charge Current	1 A (max)
Compatibility	
Suitable for use with	Menvier analogue addressable fire systems

Dimensions



H (mm)	W (mm)	D (mm)
300	300	74

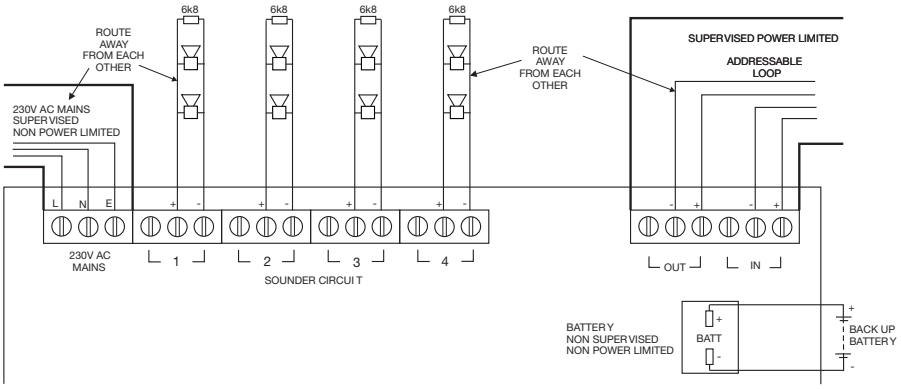
Installation

1. Remove the cover of the unit.
2. Fit the back-plate in position and pass the wires into it taking care not to damage the circuit board.
3. Connect the unit according to the diagram below.

Note:
No addressing of the interface is required. (See control panel operation for details).

This unit requires a permanent 120/230 V ac supply.

Standard Connections



Note:
1. The end of line resistors must always be fitted, even if the sounder circuits are unused. Installer / service engineer must ensure it is fitted.

2. The ANSI pattern is generated by the horns themsleves.

Description	SLC Field Wiring Circuit (input)	Single Channel Input
Wiring Gauge	12 Max AWG	12 Max AWG
Wiring Class	Class A Style 7	Class B Style Y
Ground Fault Impedance	0.1 ohm	0.1 ohm
Supervised, Power Limited	Yes	Yes, Regulated
Line Impedance	50 ohms	16 ohms
Audible Synchronised	N/A	N/A

Operation

Normal Standby, Alarm, Trouble.

Product Codes

Code	Description
ULCS354	4 Way Sounder Controller Unit

COOPER Safety
Fire Systems

SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

ULCZMU352 Zone Monitor Unit

Overview

An extensive range of interfaces are available to support the Menvier range of UL control panels, providing solutions for most design requirements.

The ULCZMU352 zone monitor unit connects zones of suitable conventional detectors or pull stations.

Features

- Quick and simple to install
- Monitors a zone of UL approved compatible conventional detectors
- Monitors a zone of UL approved compatible pull stations
- Only takes a single address
- Input monitored for open, short circuits and ground trouble
- Built in short circuit isolator

Benefits

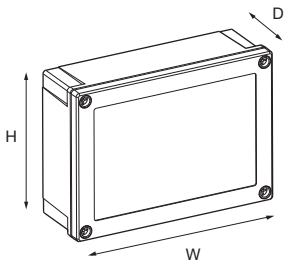
- Plug and play no hard addressing required
- Easy to expand a system using existing wiring
- No external short circuit isolator required

Technical Specification

Code	ULCZMU352
Description	Zone Mointor Unit
Standards	UL864 9th edition
Signalling Line Circuit	
Style 7, Class A, Supervised, Power Limited	
Load Current	4.9 mA to 5.0 mA
Supply Voltage	24 V dc
Detector Zone	
Style C, Class B, Supervised, Power Limited	
Voltage	21 V dc to 26 Vdc, 22.9 V dc (nom)
Current (Alarm)	17 mA to 40 mA
Line Impendance	2.5 Ω (max)
End of Line Resistance	6.6 kΩ
Fire Input Trigger	680 Ω
	UPCD-2W, UCPT-2W, UCHRI, UCHT any combination thereof
Compatibility Identifier	ULCV1
Callpoint Zone	
Style C, Class B, Supervised, Power Limited	
Voltage (8.4 Vpp pulsed every 1 second)	8.4 V
Current	1.2 mA
Trigger Resistor	680 Ω
End of Line Resistor	6.8 kΩ
Line Impedance	16 Ω
Environmental	
Operating Temperature	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH
Physical	
Dimensions (H x W x D)	180mm x 129mm x 60mm
Weight	0.28kg
Ingress Protection	IP65
Compatibility	
Suitable for use with	Menvier analogue addressable fire systems

Note:
1. Maximum number of callpoints allowed is unlimited.
2. Detector zone end of line device is 5k6 (supplied)

Dimensions



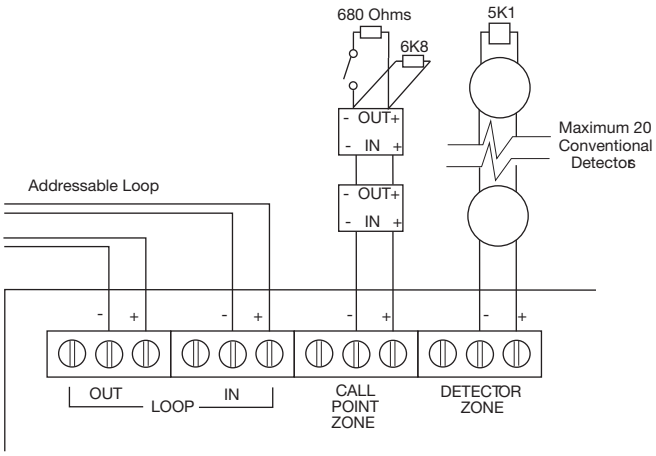
H (mm)	W (mm)	D (mm)
180	129	60

Installation

1. Separate the two halves of the unit.
2. Drill out (or knock out) the required cable entries in the surface mounting back-box.
3. Fit the back-box in position and pass the wires into it.
4. Connect the unit according to the diagram below.

Note:
No addressing of the interface is required.
(See control panel operation for details).

Standard Connections



Note:
1. This unit can only be used with Menvier ULCB2E or ULCB (CB) detector base and compatible detectors.
2. The end of line resistor must always be fitted, even if the spur is unused. Installer / service engineer must ensure it is fitted.
3. Detector zone end of line device is 5k6 (supplied).
4. Compatibility Identifier ULCV1
5. Recommended cable type FPLP (plenum cable), type FPLR (riser cable), or type FPL.

Description	SLC Field Wiring (input)	Callpoint Zone	Detector Zone
Wiring Gauge	12 Max AWG	12 Max AWG	12 Max AWG
Wiring Class	Class A Style 7	Class B Style C	Class B Style C
Ground Fault Impedance	0.1 ohm	0.1 ohm	0.1 ohm
Supervised, Power Limited	Yes	Yes	Yes

Operation

Callpoint Zone:
Normal Standby, Alarm, NAC Silenced, Alarm Reset, Trouble, Supervisory, Drill.
Detector Zone:
Normal Standby, Alarm, Trouble.

Product Codes

Code	Description
ULCZMU352	Zone Monitor Unit

COOPER Safety
Fire Systems

SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

ULCSUM355 Shop Monitor Unit

Overview

An extensive range of interfaces are available to support the Menvier range of UL control panels, providing solutions for most design requirements.

The ULCSUM355 shop monitor unit is designed to enable small units with conventional fire detection to be fully integrated with a main analogue addressable fire system. It is ideal for applications such as connecting individual shop units into a main shopping centre system.

An external power supply is required to drive the 2 conventional sounder circuits. This power supply must be UL1481 listed, regulated for fire and current limited.

Features

- Quick and simple to install
- Accepts a zone of UL approved conventional detectors and callpoints
- Provides 2 conventional sounder circuits
- Only takes a single address
- Includes output changeover relay
- Inputs monitored for open, short circuits and ground trouble

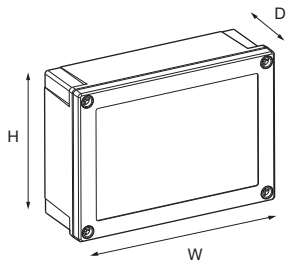
Benefits

- Plug and play no hard addressing required
- Easy to expand a system using existing wiring
- No external short circuit isolator required
- Reduced installation cost by using the 2 sounder circuits

Technical Specification

Code	ULCSUM355
Description	Shop Mointor Unit
Standards	UL864 9th edition
Signalling Line Circuit	
Style 7, Class A, Supervised, Power Limited	
Voltage	24 V dc
Current	4.9 mA to 5.0 mA
Line Impedance	50 Ω (max)
Detector Zone	
Style C, Class B, Supervised, Power Limited	
Voltage	21 V dc to 26 V dc, 22.9 V dc (nom)
Current (Alarm)	17 mA to 40 mA
Line Impedance	2.5 Ω (max)
End of Line Resistor	5.6 kΩ
Fire Input Trigger	680 Ω
	UPCD-2W, UCPT-2W, UCHRI, UCHT any combination thereof
Compatibility Identifier	ULCV1
Sounder 1, Sounder 2	
Style Y, Class B, Supervised, Power Limited	
Voltage	24 V dc
Current	1 A (max)
Line Impedance	8 Ω
End of Line Resistance	12 kΩ
Callpoint Zone	
Style C, Class B, Supervised, Power Limited	
Voltage (8.4 Vpp pulsed every 1 second)	8.4 V
Current	1.2 mA
Line Impedance	16 Ω
End of Line Resistor	6.8 kΩ
Trigger Resistor	680 Ω
24 V external PSU	
Supervised, Power Limited	
Voltage	24 V dc
Current	2 A (max)
End of Line Resistor	12 kΩ
Line Impendance	4 Ω
Gauge Wire	12 AWG UL 1481 listed regulated for fire, current limited
Environmental	
Operating Temperature	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH
Physical	
Dimensions (H x W x D)	180mm x 129mm x 60mm
Weight	0.28kg
Ingress Protection	IP65
Compatibility	
Suitable for use with	Menvier analogue addressable fire systems

Dimensions



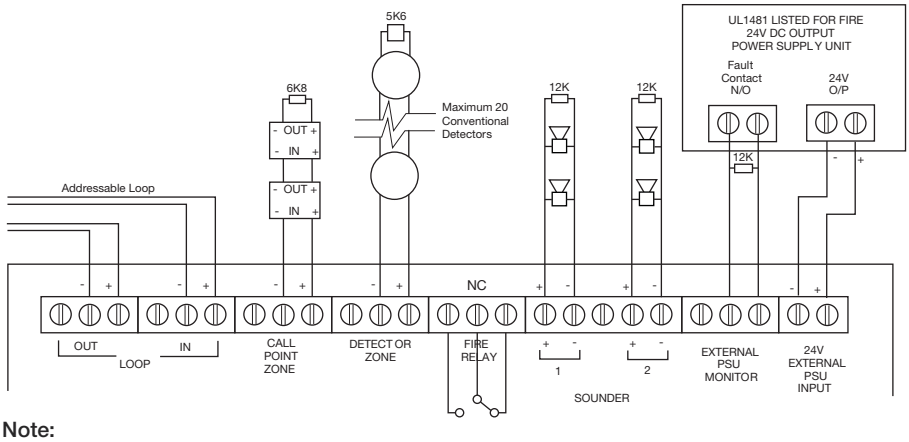
H (mm)	W (mm)	D (mm)
180	129	60

Installation

1. Separate the two halves of the unit.
2. Drill out (or knock out) the required cable entries in the surface mounting back-box.
3. Fit the back-box in position and pass the wires into it.
4. Connect the unit according to the diagram below.

Note:
No addressing of the interface is required.
(See control panel operation for details).

Standard Connections



Note:
1. The end of line resistor must always be fitted, even if the inputs are unused.
2. Recommended cable type FPLP (plenum cable), type FPLR (riser cable), or type FPL.

Description	SLC Field Wiring (Input)	Callpoint Zone	Detector Zone	Sounder 1 Sounder 2	24 V External Supply	External PSU Monitor
Wiring Gauge	12 Max AWG	12 Max AWG	12 Max AWG	12 Max AWG	12 Max AWG	12 Max AWG
Wiring Class	Class A Style 7	Class B Style C	Class B Style C	Class B Style Y	N/A	N/A
Ground Fault Impedance	0.1 ohm	0.1 ohm	0.1 ohm	0.1 ohm	TBD Power Supply	TBD Power Supply
Supervised, Power Limited	Yes	Yes	Yes	Regulated Supervised Power Limited	Supervised Power Limited	Supplementary
Compatibility Identifier	ULCV1 Compatible Detectors: UPCD-2W, UCPT-2W, UCHRI, UCHT, UCHTI					

Operation

Callpoint Zone:
Normal Standby, Alarm, NAC Silenced, Alarm Reset, Trouble, Supervisory, Drill.
Detector Zone:
Normal Standby, Alarm, Trouble.

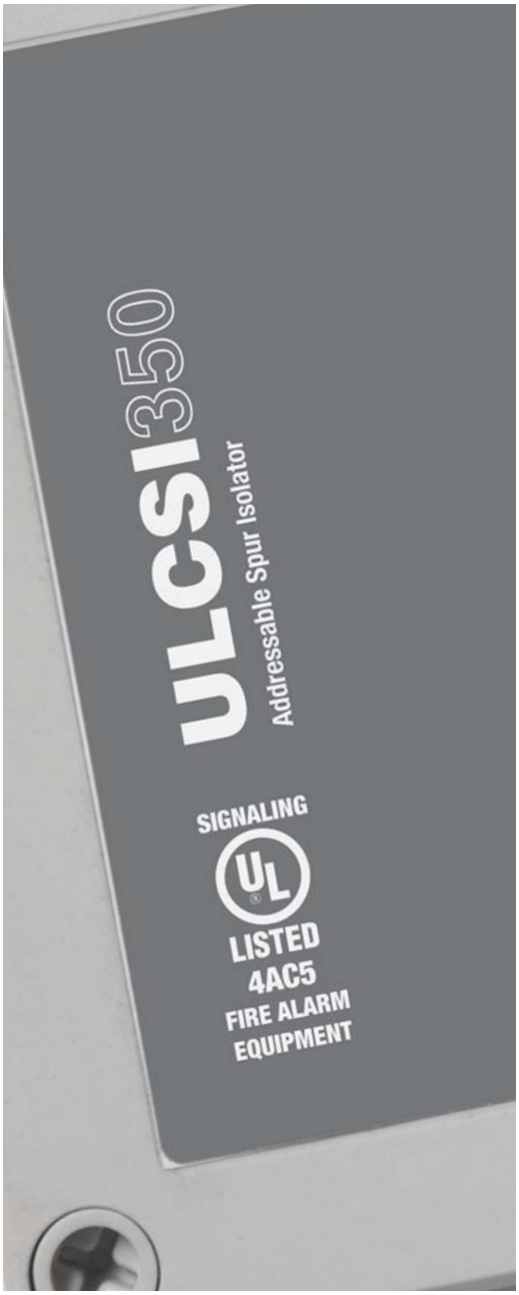
Product Codes

Code	Description
ULCSUM355	Shop Monitor Unit

COOPER Safety
Fire Systems

SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

ULCSI350 Spur Isolator Unit



Overview

An extensive range of interfaces are available to support the Menvier range of UL control panels, providing solutions for most design requirements.

The ULCSI350 spur isolator unit enables a spur of analogue devices to be connected to a main analogue loop, the device is designed to simplify installation of remote parts of buildings or for simple system extensions.

Features

- Quick and simple to install
- Allows a spur of analogue devices to be fed from the main loop
- Integral short circuit isolators for the loop and the spur
- Automatically controls addressing sequence
- Built in short circuit isolator

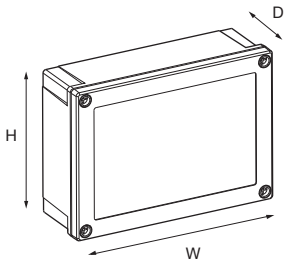
Benefits

- Plug and play no hard addressing required
- Easy to expand a system using existing wiring
- Reduced installation cost
- No external short circuit isolator required

Technical Specification

Code	ULCSI350
Description	Spur Isolator Unit
Standards	UL864 9th edition
Signalling Line Circuit	
Style 7, Class A, Supervised, Power Limited	
Voltage	24 V dc
Current	0.30 mA to 0.33 mA
Spur Output	
Style 4, Class B, Supervised, Power Limited	
Voltage	24 V dc
Current	2 mA to 500 mA
Line Impedance	50 (max)
Environmental	
Operating Temperature	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH
Physical	
Dimensions (W x H x D)	180mm x 129mm x 60mm
Weight	0.28kg
Ingress Protection	IP65
Compatibility	
Suitable for use with	Menvier analogue addressable fire systems

Dimensions



H (mm)	W (mm)	D (mm)
180	129	60

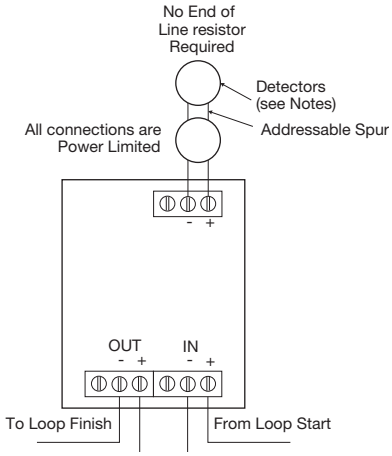
Installation

1. Fit the unit in position.
2. Connect the unit according to the diagram below.

Note:
A spur isolator unit **must** be used when making spurs from the analogue addressable panel loop. Without this unit, the self addressing features of the system will not function correctly.

No addressing of the interface is required.
(See control panel operation for details).

Standard Connections



Note:
1. This unit can only be used with Menvier UCAB300 and WBA detector bases and compatible detectors.
2. Recommended cable type FPLP (plenum cable), type FPLR (riser cable), or type FPL.

Description	SLC Field Wiring Circuit (input)	Single Channel Input
Wiring Gauge	12 Max AWG	12 Max AWG
Wiring Class	Class A Style 7	Class B Style 4
Ground Fault Impedance	0.1 ohm	0.1 ohm
Supervised, Power Limited	Yes	Yes
Max Line Impendance	50	50

Product Codes

Code	Description
ULCSI350	Spur Isolator Unit

COOPER Safety
Fire Systems

SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

ULCIO351 3 Channel I/O Unit

Overview

An extensive range of interfaces are available to support the Menvier range of UL control panels, providing solutions for most design requirements.

The ULCIO351 three channel I/O unit enables simple interfacing between the fire system and other equipment such as nurse call systems or access control systems. The inputs are fully monitored for open, short circuits and ground trouble

Features

- Quick and simple to install
- Soft addressed
- 3 separate inputs and 3 separate outputs
- Inputs monitored for open and short circuits
- Integral short circuit isolator

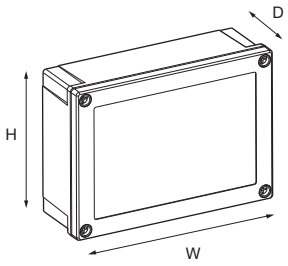
Benefits

- Plug and play no hard addressing required
- Built in short circuit isolator no additional hardware required
- Unit takes 3 inputs, 3 outputs - only 1 address required to monitor and control saving on equipment and installation

Technical Specification

Code	ULCIO351
Description	3 Channel I/O Unit
Standards	UL864 9th edition
Signalling Line Circuit	
Style 7, Class A, Supervised, Power Limited	
Operating Voltage	24 V dc
Current	1.4 mA to 1.36 mA
Line Impedance	50 Ω
Inputs 1, 2, 3 Contact Only Initiating Circuit	
Style C, Class B, Supervised, Power Limited	
Voltage (8.4 Vpp pulsed every 1 second)	8.4 (max)
Current	1 mA (max)
Line Impedance	16 Ω (max)
Trigger Resistance	5.6 kΩ
End of Line Resistor	22 kΩ
Ouput 1, 2, 3	
3 Contact Set Programmable	
Voltage	24 V dc to 30 V dc
Current	1 A (max, Resistive PF1)
Switching Power	33 kΩ (min)
Power Factor	1
Environmental	
Operating Temperature	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH
Physical	
Dimensions (H x W x D)	180mm x 129mm x 60mm
Weight	0.28kg
Ingress Protection	IP65
Compatibility	
Suitable for use with	Menvier analogue addressable fire systems

Dimensions



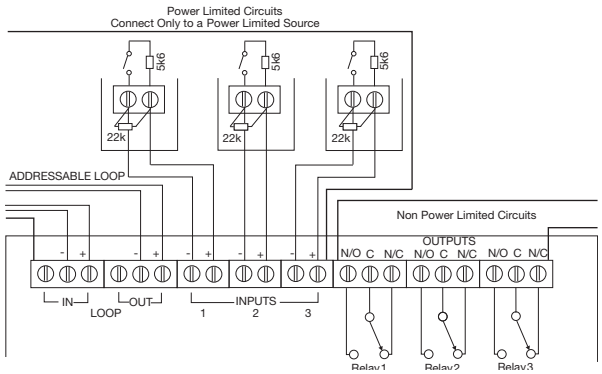
H (mm)	W (mm)	D (mm)
180	129	60

Installation

1. Separate the two halves of the unit.
2. Drill out (or knock out) the required cable entries in the surface mounting back-box.
3. Fit the back-box in position and pass the wires into it.
4. Connect the unit according to the diagram below.

Note:
No addressing of the interface is required.
(See control panel operation for details).

Standard Connections



Note:
1. The end of line resistor must always be fitted, even if the inputs are unused. Installer / service engineer must ensure it is fitted.
2. Monitored inputs can detect open circuit, short circuit or ground faults.
3. Output relays are volt-free contacts and are not monitored, but most be conected to power limited source.
4. Each I/O channel consumes a separate address and has the facility for separate text for each channel.
5. Recommended cable type FPLP (plenum cable), type FPLR (riser cable), or type FPL.

Description	SLC Field Wiring (input)	Input 1, 2, 3	Output 1, 2, 3
Wiring Gauge	12 Max AWG	12 Max AWG	12 Max AWG
Wiring Class	Class A Style 7	Class B Style C	N/A
Ground Fault Impedance	0.1 ohm	0.1 ohm	0.1 ohm
Supervised, Power Limited	Yes	Yes	Programmable

Operation

Input 1, 2, 3 Operation:
Normal Standby (Default), Alarm, Alarm, NAC Silenced, Alarm Reset, Trouble. Trouble, Supervisory, Drill. (Features programmable using PC site installer).

Output 1, 2, 3 Operations:
Normal Standby, Alarm.

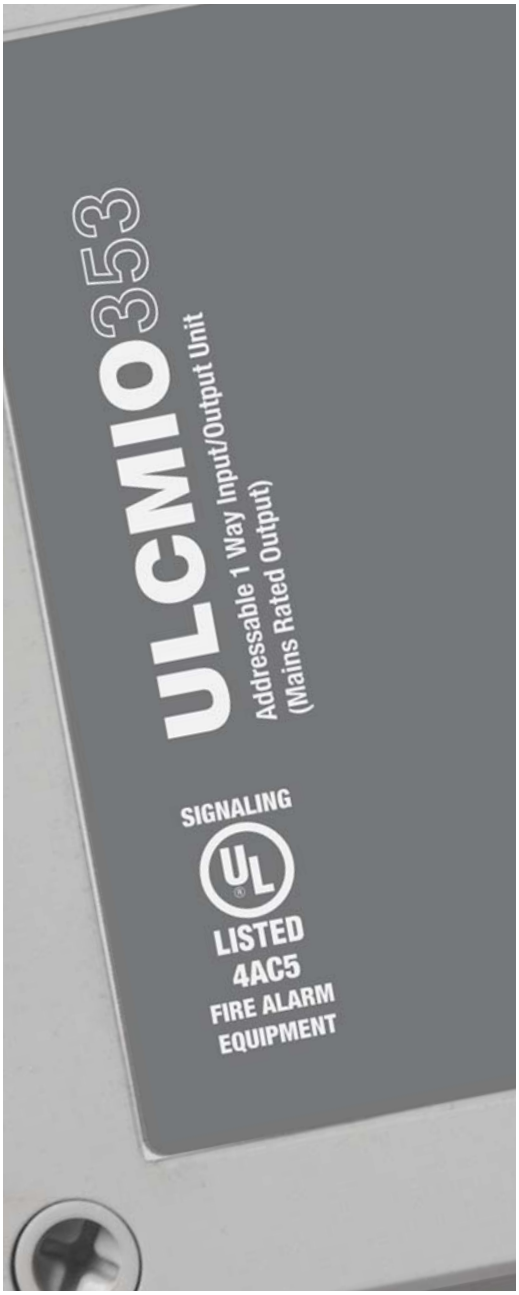
Product Codes

Code	Description
ULCIO351	3 Channel I/O Unit

COOPER Safety
Fire Systems

SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

ULCMIO353 120 V / 230 V Relay Unit



Overview

An extensive range of interfaces are available to support the Menvier range of UL control panels, providing solutions for most design requirements.

The ULCMIO353 120 V / 230 V relay unit enables simple interfacing between the fire system and other equipment such as nurse call systems or access control systems.

The ability of the output unit to switch mains also makes the unit ideal for plant control or mains powered door holders.

Features

- Quick and simple to install
- Soft addressed
- Only takes a single address
- Integral short circuit isolator

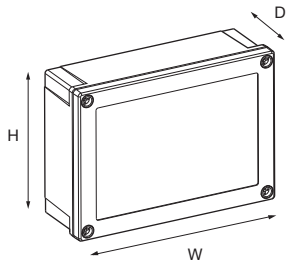
Benefits

- Plug and play no hard addressing required
- Easy to expand a system using existing wiring
- No external short circuit isolator required

Technical Specification

Code	ULCMIO353
Description	120 V / 230 V Relay Unit
Standards	UL864 9th edition
Signalling Line Circuit	
Style 7, Class A, Supervised, Power Limited	
Voltage	24 V dc
Current	335 µA to 395 µA
Line Impendance	50 ohm
Output 1 (Programmable)	
Voltage	120 V ac to 230 V ac
Contact Rating	1 A Resistive
Power Factor	1
Environmental	
Operating Temperature	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH
Physical	
Dimensions (W x H x D)	180mm x 129mm x 60mm
Weight	0.28kg
Ingress Protection	IP65
Compatibility	
Suitable for use with	Menvier analogue addressable fire systems

Dimensions



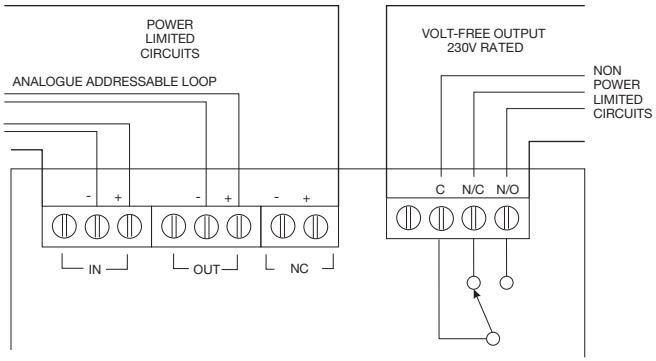
H (mm)	W (mm)	D (mm)
180	129	60

Installation

1. Separate the two halves of the unit.
2. Drill out (or knock out) the required cable entries in the surface mounting back-box.
3. Fit the back-box in position and pass the wires into it.
4. Connect the unit according to the diagram below.
5. The single channel I/O, ULCMIO353 is suitable for one conduit connection. Only the mains is allowed this conduit connection. The hub shall be connected to the conduit before the hub is connected to the enclosure.

Note:
No addressing of the interface is required.
(See control panel operation for details).

Standard Connections



Note:
1. The end of line resistor must always be fitted, even if the inputs are unused. Installer / service engineer must ensure it is fitted.

Description	SLC Field Wiring (input)	Output 2
Wiring Gauge	12 Max AWG	12 Max AWG
Wiring Class	Class A Style 7	N/A
Ground Fault Impedance	0.1 ohm	0.1 ohm
Supervised, Power Limited	Yes	Programmable

Operation

Output 1 Operation:
Normal Standby, Alarm

Warning!

Segregate mains cable from other connections to this unit.

120V / 230V relay output is un-fused. Ensure that the 120V / 230V supply feeding this unit is adequately protected.

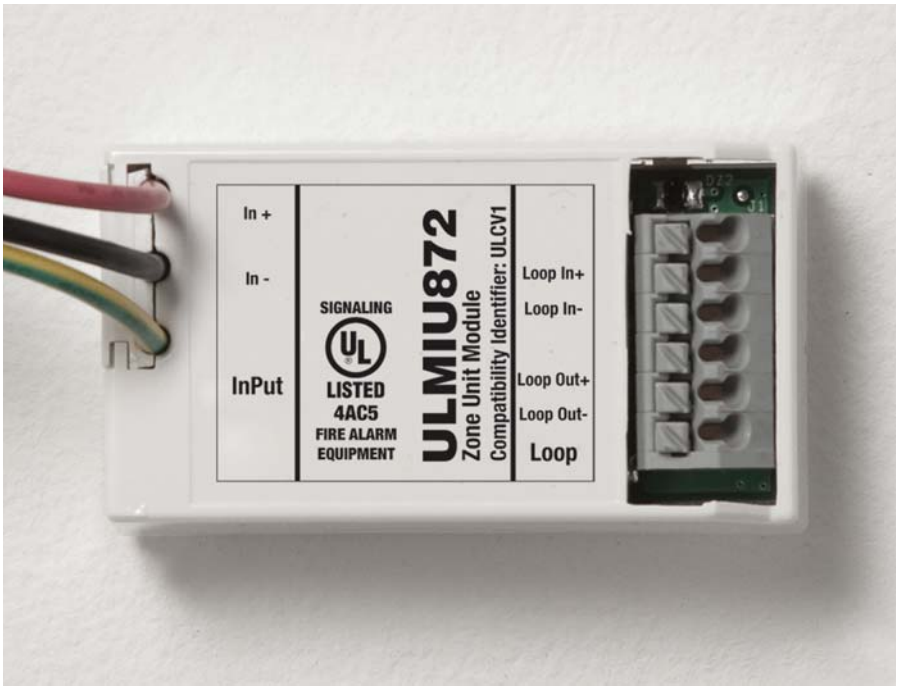
Product Codes

Code	Description
ULCMIO353	120 V / 230 V Relay Unit

COOPER Safety
Fire Systems

SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

ULMIU872 Micro Zone Monitor Unit



Overview

An extensive range of interfaces are available to support the Menvier range of UL control panels, providing solutions for most design requirements.

The ULMIU872 zone monitor unit is an extremely compact unit ideal for incorperation in other equipment.

Features

- Quick and simple to install
- Monitors a zone of UL approved compatible conventional detectors
- Only takes a single address
- Input monitored for open and short ground trouble
- Active end of line monitoring
- Built in short circuit isolator

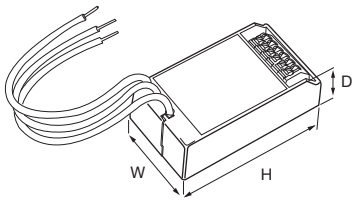
Benefits

- Plug and play no hard addressing required
- Easy to expand a system using existing wiring
- No external short circuit isolator required

Technical Specification

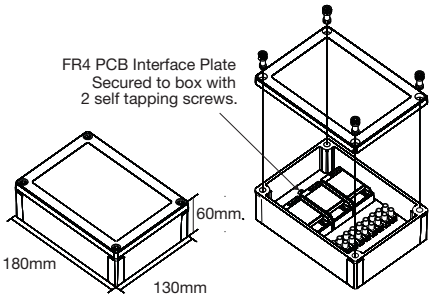
Code	ULMIU872
Description	Zone Mointor Unit
Standards	UL864 9th edition
Signalling Line Circuit	
Style 7, Class A, Supervised, Power Limited	
Voltage	24 V dc
Current	4.9 mA to 5.0 mA
Detector Zone	
Style D, Class A, Supervised, Power Limited	
Voltage	21 V dc to 26 V dc (22.9 nom)
Current	17 mA to 40 mA
Line Impedance	2.5 Ω (max)
End of Line Resistor	5.6 kΩ
Fire Input Trigger	680 kΩ
	UPCD-2W, UCPT-2W, UCHRI, UCHT, UCHTI, any combination thereof
	Compatibility Identifier : ULCV1
Environmental	
Operating Temperature	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH
Physical	
Dimensions (H x W x D)	65mm x 35mm x 18.5mm
Weight	0.28kg
Ingress Protection	IP40
Compatibility	
Suitable for use with	Menvier analogue addressable fire systems

Dimensions



H (mm)	W (mm)	D (mm)
65	35	18.5

Housing

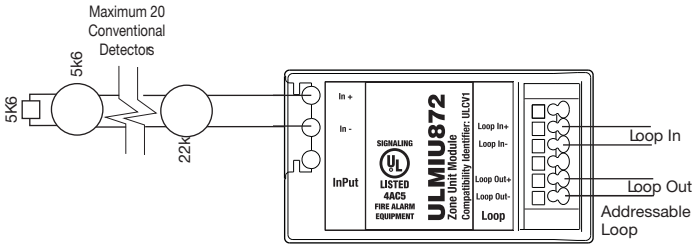


Installation

1. Fit the box in position using the mounting details below.
2. Connect the unit according to the diagram below.
3. The ULMIU872 module can be fitted inside a junction box.
4. Up to 3 ULMIU872 modules can be fitted inside the FIBOX as per diagram below.

Note:
No addressing of the interface is required.
(See control panel operation for details).

Standard Connections



Note:
1. This unit can only be used with conventional detector base and compatible detectors.
2. Only connect cable screen to its adjacent earth terminal.
3. The end of line resistor must always be fitted, even if the spur is unused. Installer / service engineer must ensure it is fitted.
4. Maximum number of callpoints allowed is unlimited.
5. Detector zone end of line device is 5k6 (supplied).
6. Compatibility Identifier ULCV1.
7. Recommended cable type FPLP (plenum cable), type FPLR (riser cable), or type FPL.

Description	SLC Field Wiring (input)	Detector Zone
Wiring Gauge	12 Max AWG	12 Max AWG
Wiring Class	Class A Style 7	Class B Style C
Ground Fault Impedance	0.1 ohm	0.1 ohm
Supervised, Power Limited	Yes	Yes

Operation

Normal Standby, Alarm, Alarm Test, Alarm Silence, Alarm Reset, Trouble. Trouble Silence, Off- normal position of switches

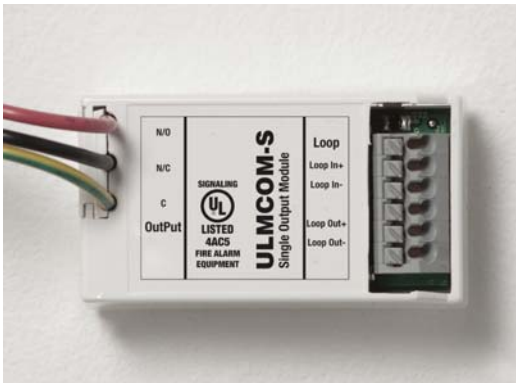
Product Codes

Code	Description
ULMIU872	Micro Zone Monitor Unit
ULBU	Mini Module Box Unit (Empty box)

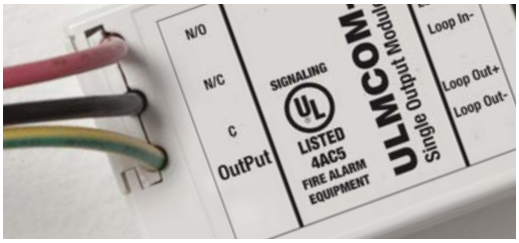
COOPER Safety
Fire Systems

SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

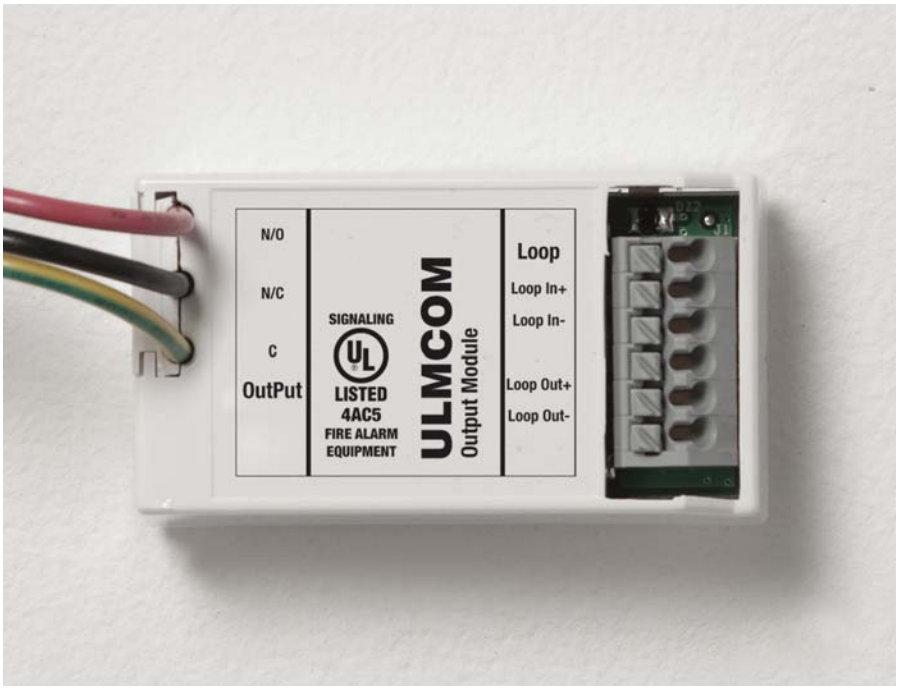
ULMCOM & ULMCOM-S Mini Single Channel Output Units



ULMCOM-S - Identified by panel as sounder



UL approved micro interface



Overview

An extensive range of interfaces are available to support the Menvier range of UL control panels, providing solutions for most design requirements.

The ULMCOM and ULMCOM-S are single channel output units and are extremely compact and therefore ideal for incorporation into other equipment.

The ULMCOM is identified by the panel as an input/output unit.

The ULMCOM-S is identified by the panel as a sounder.

The maximum number of ULMCOM-S units per loop is 60, and is counted towards the total number of sounders on the loop.

Features

- Quick and simple to install
- Compact size
- Soft Addressed
- Integral short circuit isolator

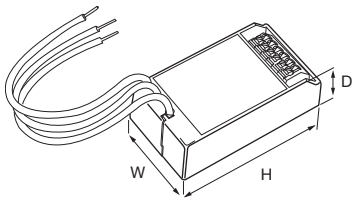
Benefits

- Plug and play no hard addressing required
- No external short circuit isolator required

Technical Specification

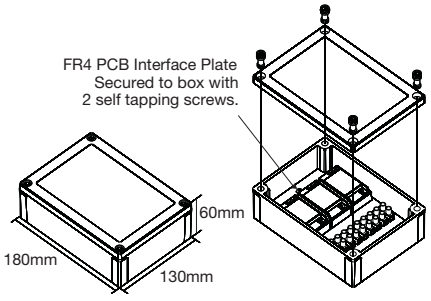
Code	ULMCOM and ULMCOM-S
Description	Single Channel Output Units
Standards	UL864 9th edition
Signalling Line Circuit	
Style 7, Class A, Supervised, Power Limited	
Current	0.322 mA (max)
Output Relay	
Supervisory Programmable	
Switching Voltage	24 V dc to 30 V dc
Contact Rating	1 A Resistive, pf=1 (max)
Max Line Impedance	16 Ω
Power Factor	1
Environmental	
Operating Temperature	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH
Physical	
Dimensions (H x W x D)	65mm x 35mm x 18.5mm
Weight	>0.1kg
Ingress Protection	IP40
Compatibility	
Suitable for use with	Menvier analogue addressable fire systems

Dimensions



H (mm)	W (mm)	D (mm)
65	35	18.5

Housing

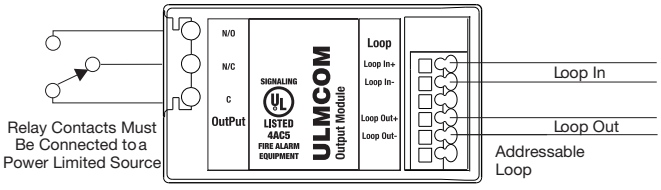


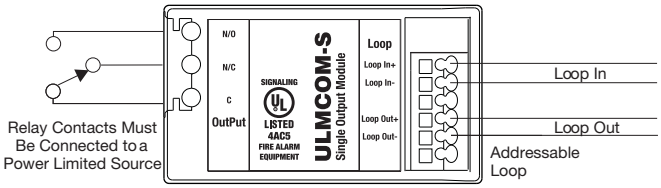
Installation

1. Fit the box in position using the mounting details below.
2. Connect the unit according to the diagram below.
3. The ULMCOM & ULMCOM-S modules can be fitted inside a junction box.
4. Up to 3 ULMCOM & ULMCOM-S modules can be fitted inside the FIBOX, as per diagram below.

Note:
No addressing of the interface is required.
(See control panel operation for details).

Standard Connections





Note:
1. Output relay are volt-free contacts and are not monitored.
2. Recommended cable type FPLP (plenum cable), type FPLR (riser cable), or type FPL.

Description	SLC Field Wiring Circuit (input)	Single Channel Output
Wiring Gauge	12 Max AWG	12 Max AWG
Wiring Class	Class A Style 7	
Ground Fault Impedance	0.1 ohm	
Supervised, Power Limited	Yes	Yes

Operation

Normal Standby, Alarm.

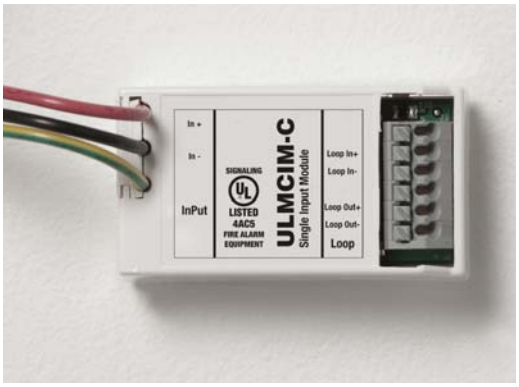
Product Codes

Code	Description
ULMCOM	Mini Single Channel Output Unit (recognised as output unit)
ULMCOM-S	Mini Single Channel Output Unit (recognised as sounder)
ULBU	Mini Module Box Unit (Empty box)

COOPER Safety
Fire Systems

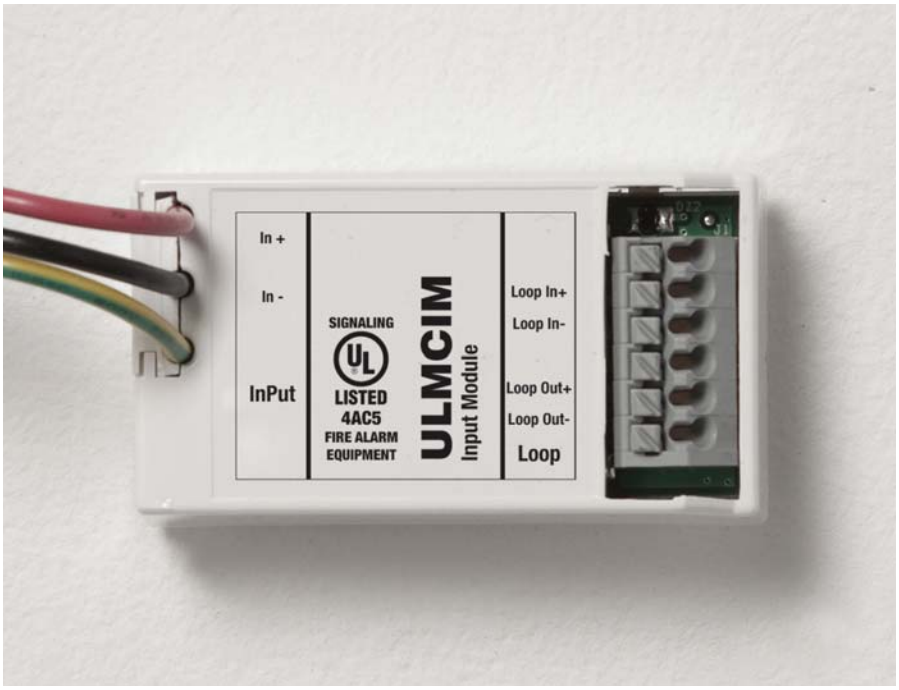
SIGNALING
LISTED
4AC5
FIRE ALARM
EQUIPMENT

ULMCIM & ULMCIM-C Mini Single Channel Input Units



ULMCIM-C - Identified by panel as callpoint

UL approved mico interface



Overview

An extensive range of interfaces are available to support the Menvier range of UL control panels, providing solutions for most design requirements.

The ULMCIM and ULMCIM-C are designed for use with water flow switches and other applications requiring the monitoring of dry contact alarm devices.

The ULMCIM and ULMCIM-C are single channel input units and are extremely compact and therefore ideal for incorporation into other equipment.

The ULMCIM-C is designed for use with pull stations (fast response to alarm)

The ULMCIM-C is identified by the panel as a callpoint.

Features

- Quick and simple to install
- Compact size
- Soft Addressed
- Integral short circuit isolator

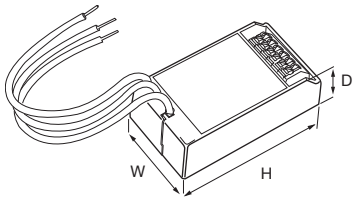
Benefits

- Plug and play no hard addressing required
- No external short circuit isolator required

Technical Specification

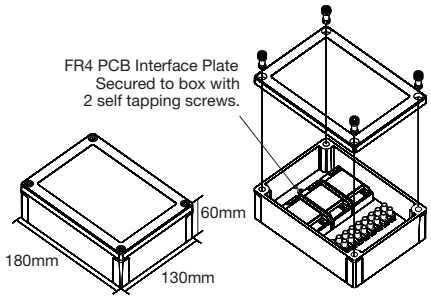
Code	ULMCIM and ULMCIM-C
Description	Single Channel Input Units
Standards	UL864 9th edition
Signalling Line Circuit	
Style 7, Class A, Supervised, Power Limited	
Current	332 µA
Operating Voltage	24 V dc
Input	
Initiating Circuit Class B, Style C, Supervised, Power Limited	
Voltage (8.4 Vpp every 1 second)	8.4 V dc
Current	1.2 mA
Trigger Resistance	5.6 k
End Of Line Resistor	22 k
Line Impendance	16 (max)
Environmental	
Operating Temperature	0°C to 49°C
Humidity (Non Condensing)	0 to 93 %RH
Physical	
Dimensions (H x W x D)	65mm x 35mm x 18.5mm
Weight	>0.1kg
Ingress Protection	IP40
Compatibility	
Suitable for use with	Menvier analogue addressable fire systems

Dimensions



H (mm)	W (mm)	D (mm)
65	35	18.5

Housing

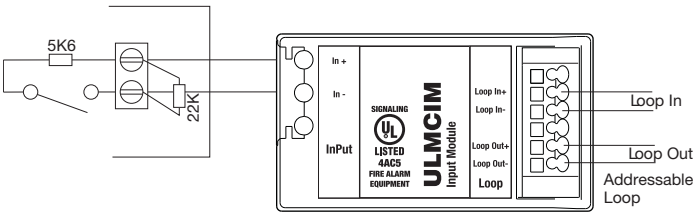


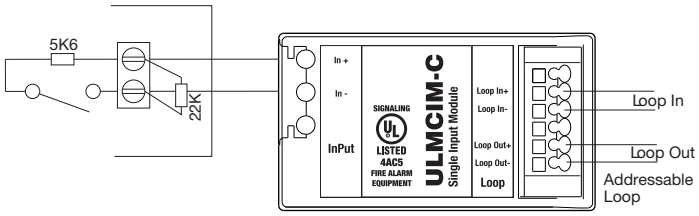
Installation

1. Fit the box in position using the mounting details below.
2. Connect the unit according to the diagram below.
3. ULMCIM & ULMCIM-S module can be fitted inside a junction box.
4. Up to 3 ULMCIM & ULMCIM-C modules can be fitted inside the FIBOX, as per diagram below.

Note:
No addressing of the interface is required.
(See control panel operation for details).
This needs to be programmed as a callpoint on site installed PC software.

Standard Connections





Note:
1. The end of line resistor provided must always be fitted, even if the input is unused.
2. Monitored inputs can detect open or short circuit faults.
3. Recommended loop cable type: FIRETUF, FP200, MICC.

Description	SLC Field Wiring Circuit (input)	Single Channel Input
Wiring Gauge	12 Max AWG	12 Max AWG
Wiring Class	Class A Style 7	Class B Style C
Ground Fault Impedance	0.1 ohm	0.1 ohm
Supervised, Power Limited	Yes	Yes

Operation

Normal Standby, Alarm, NAC Silenced, Alarm Reset, Trouble, Supervisory, Drill

Product Codes

Code	Description
ULMCIM	Mini Single Channel Input Unit (recognised as input unit)
ULMCIM-C	Mini Single Channel Input Unit (recognised as callpoint)
ULBU	Mini Module Box Unit (Empty box)

Conditions of sale
All goods supplied are subject to the company's general conditions of sale which are available on request.

Trade Descriptions
All descriptions represent only particulars of the goods to which they apply and do not form part of any contract. The company reserves the right to change specification without prior notification or public announcement.

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